

State of EFFECTIVENESS

## Introduction

This State of Effectiveness Report is designed to provide an overview of the City of Carlsbad's overall performance in many different service areas. This report represents the sixth full year that the City of Carlsbad has been involved in performance measurement. The departmental performance measures, growth management measures and citizen survey results are contained in this report. The summaries are organized by Council Strategic Goal and are subdivided into service delivery areas where appropriate.

Departments are encouraged to develop outcome-based measures. The achievement of the desired outcomes is focused on three related areas \* service delivery, cost efficiency, and customer satisfaction. This process of defining and measuring these three areas helps provide a balanced approach in evaluating the overall effectiveness of a department or service. The report, where applicable, indicates compliance with the Growth Management Standard for that particular service, and highlights any relevant results from the annual citizen survey. Included this year are introductory summaries for each City Council Strategic Goal. These summaries are a consolidation of the information contained within each of the measures. By focusing greater attention on the summaries, staff is able to better identify the overall effectiveness of the service area. Since the organization's efforts to accomplish the Council's strategic goals involve management goals, those goals are also listed.

The performance measurement process represents the feedback loop between organizational effort and achieving the desired outcomes. In Carlsbad, the State of Effectiveness Report also represents the beginning of the next goal cycle. At the beginning of each calendar year, the results of the citywide public opinion survey are finalized and presented to Council at their annual goal-setting workshop. The State of Effectiveness Report is also completed and published at this time. The survey results and the report provide information that helps influence strategic priorities for the upcoming year. Based on direction from Council, departments develop goals and cost estimates for new programs, which are then included in the City's budgeting and management goal process. Departments implement new programs, measure results, contact other agencies for benchmarking, and analyze data during the second half of the calendar year.

The format of this year's State of Effectiveness Report is similar to last year's. There are many new measures in this year's report there are still parts of the organization that are not fully integrated into the performance measurement program. Staff will continue to develop measures in the coming year.

Lastly, staff would like to thank the various Departments actively engaged in continuous improvement through the Performance Measurement process. These service providers are openly committed to the efficient delivery of services to the people who live, work, and play in the City of Carlsbad. Defining an outcome and measuring progress towards improving that outcome can be difficult and staff thanks all participants for their commitment to continuous improvement.

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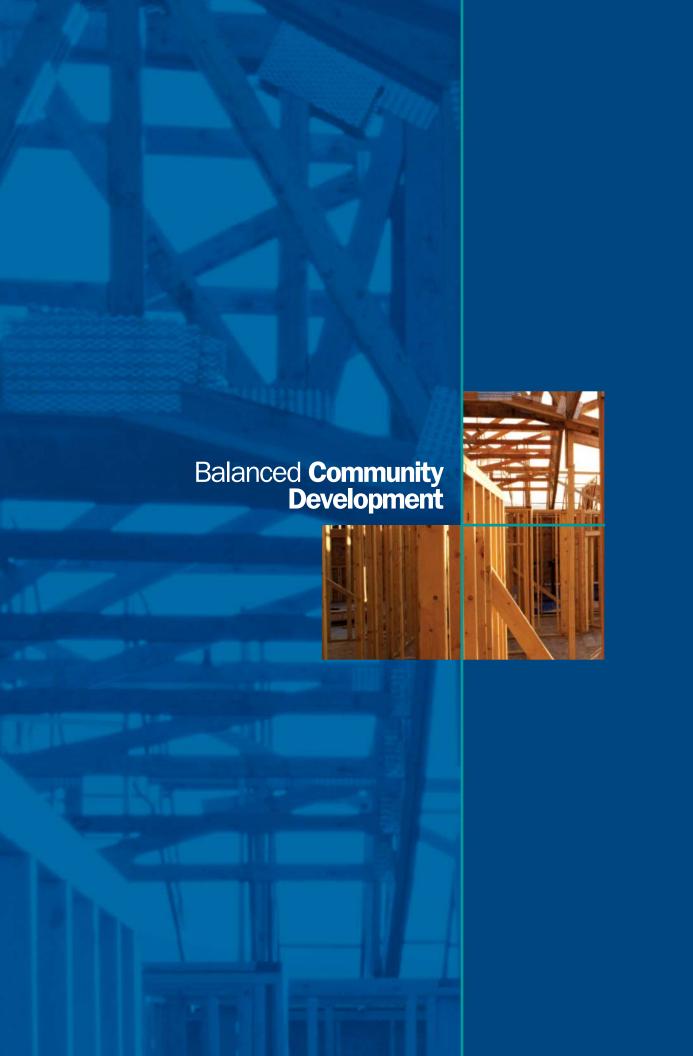
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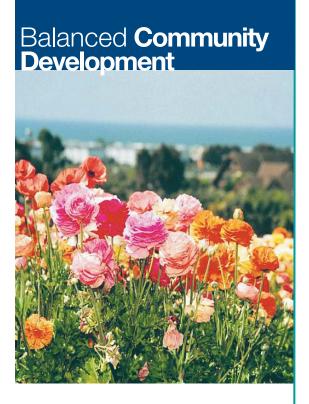
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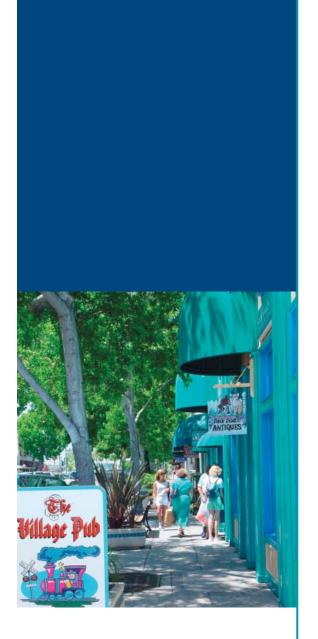
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## **Appendix**





Be a city that connects community, place and spirit, through balanced and economically sustainable land uses



## **Balanced Community Indicators**

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- Section 8 Program Assessment
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- Planning Citizen and Customer Satisfaction
- Redevelopment Property Values, Sales Tax, and Vacancy Rates
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- Update Title 20, Subdivision Ordinance
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- Village Retail Analysis Wants & Needs
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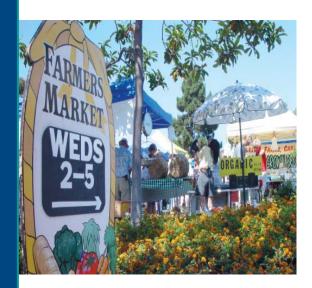
# Why is it important to Carlsbad?

A balanced community in Carlsbad ensures a diversity of high quality housing, jobs, shopping and recreational opportunities and more for its citizens. The Planning Department maintains and implements the General Plan. This is critical to the successful development of the City and a balanced community as expressly desired by its citizens.

Citizens expect a responsive Code Enforcement system that enhances the quality of life of City residents by requiring owners of property in non-compliance with City codes to come into compliance.

Through the Redevelopment Agency, redevelopment programs are implemented which are often the most effective way to breathe new life into older and often deteriorated or deteriorating areas. The areas can receive new focused attention and financial investment to revitalize the business climate, reverse deteriorating trends and gain active participation and investment by citizens which otherwise may not occur. The Housing office implements a variety of programs in an effort to assist the community in meeting its need for affordable housing.

Efficient use of Capital Improvement fund and producing timely projects is an important aspect of the development of this community. Staff endeavors to produce high quality projects as detailed in the City's CIP and as needed to satisfy the Growth Management Plan.



## **Code Enforcement**

Code Enforcement cases increased about 22% in 2005. Expenditures were steady with no additional personnel added to this service area. Consequently there was a slight decrease in the case closure rates (-7%). The department's self-selecting survey respondents had positive comments about the professionalism, timeliness and ease of contact. Staff is reviewing the case-types and their methodologies to determine means to achieve code compliance without resorting to formal casework.

Staff is closing about 80% of cases within expected time frames. Cost per case (when closed) is at about \$350 each over the entire year. The repeat violations on the same property dropped slightly this year from 10% to 8%.

## **Land Use Planning**

In the 2005 Citywide Annual Public Opinion Survey, residents were asked their opinions regarding the balance of land use and the quality of development throughout the City. Resident's perception of Balanced Land Use remained positive. However, there were residents that remained concerned about "Overdevelopment and Crowding" (e.g. traffic congestion, insufficient infrastructure, lack of open space). These issues are typical of growing cities and are addressed long-term through the City's Growth Management Plan.



## Redevelopment

The Village Area has experienced another year above the benchmark in terms of Public/Private investment ratio. Two projects contributed most prominently to this: The Village by the Sea mixed use project, and the Laguna Point Luxury Condominiums. Both projects are keys to improving the North State Street Area.

Customer experience within the Village Area was measured in 2004. The results of that survey indicate that 61.3 percent of the respondents visit the downtown Village Area at least once a week. Respondents of the 2004 survey were asked to give their overall impression of Carlsbad Village by giving a rating from 0 to 10, with 0 meaning poor and 10 meaning excellent. The average rating was 7.99. A total of 86% of the respondents gave the Village a



rating of 7 or higher, which is in the good to excellent range. Dining was the most common reason given for visiting the Village Area. The Redevelopment Agency is conducting a needs assessment survey to determine additional ways to make the area more attractive to visitors, businesses and residents.

Property tax and sales tax increased by 3% and 13% respectively in the Village Redevelopment Area in 2005. Commercial vacancy rates were at 5% - within the benchmark standard of 5% or less. The Agency processed 10 Major and 14 Administrative Redevelopment Permits – both well above their benchmarks. The ratio of Public Funding to Private Investment was \$1: \$15. This is the third consecutive year of a positive Public: Private ratio.

## Capital Improvement Program (CIP)

In this initial year of Performance Measurement for the CIP, Engineering Services reported that their average project delivery cost percentage was 23% - a smaller cost percentage than the top four performing cities in their benchmarking study. 10 of the 12 projects completed were below the 41% expected "soft costs" allowed for Engineering Services. 57% of the projects were completed within the approved construction schedule, although two projects missed their deadline by a few days. The actual construction costs for these 12 projects were all within approved budget (including change orders).

## Public Works

## CAPITAL IMPROVEMENT PROGRAM - ENGINEERING SERVICES

#### THE OUTCOME

Cost effective capital improvement project delivery.

## THE MEASUREMENT

Data will be collected on a fiscal year basis to compare the engineering staff and consultant costs to project construction costs.

## WHAT THE DATA MEANS

Each project in the capital improvement program should be completed with Engineering Division expenses not exceeding normal project cost projections for project administration, engineering inspection, and specialized consultant services such as environmental and geotechnical investigations.

Costs for engineering services will be measured for identified projects and compared to project construction costs to determine the project delivery cost percentages. The data will then be compared to the California Multi-Agency CIP Benchmarking Study (Benchmarking Study), which includes seven cities in California. It is desirable to maintain project delivery costs, for engineering services, within the top four of the best performing of the seven cities in the Benchmarking Study. Certain projects may be precluded from the survey because they have extreme environmental requirements, include special financing consultants such as assessment districts, or are relatively small in construction cost.

## **DEPARTMENTS INVOLVED**

Engineering.

## **BENCHMARK**

Project delivery cost percentages will be compared to the cost percentages of cities identified in the Benchmarking Study.

The average project delivery cost percentage should not exceed the top range for the four top performing cities identified in the Study (30%).

Additionally, 75% of all identified City of Carlsbad projects should have project delivery costs below the maximum average project delivery cost percentage listed in the Study (40.7%).

## RESULTS

	Benchmark	FY04-05
Average Engineering costs as a percentage of total construction costs	Not to Exceed 30%	23%
Percentage of Projects where Engineering costs are below suggested maximum of 40.7% as a percentage of total construction costs	75% or Greater	83%

## ANALYSIS

The City of Carlsbad's average project delivery cost percentage for fiscal year 2004 -2005 is 23% of total construction cost (TCC.) This is below the range of the top four performing cities in the Benchmarking Study, which ranged from 25.3% to 30.1%. Therefore, Carlsbad's results are better than any of the other cities identified in the Benchmarking Study.

In reviewing the Project Delivery Percentage Costs, ten out of twelve of Carlsbad's CIP projects, or more that 75% of Carlsbad's CIP Projects, were below the maximum allowed of 40.7% for engineering services as listed in the Benchmarking Study. This result is within the benchmark requirement.

Based on the findings in this first year of analysis, the City of Carlsbad is in compliance with the benchmark objectives established for project delivery in relation to engineering costs.

## PROJECT DELIVERY PERCENTAGES CALCULATIONS Projects Receiving Notice of Completion in 2004-05

		Total	Total	Total
	Project Name	Engineering	Construction	Percent of TCC
		Costs	Costs	ICC
1	Traffic Signal at Calle Barcelona and Paseo Aliso (3894-1)	\$13,933	\$141,980	10%
2	Rehabilitation North Agua Hedionda Interceptor Eastern Segment (3874)	\$113,215	\$183,610	62%
3	Carlsbad Water Recycling Facility (3675-2)	\$2,561,955	\$10,013,754	26%
4	Avenida Encinas Sewer Rehabilitation (Funded by O&M)	\$57,015	\$167,547	34%
5	Poinsettia Lane Reach C (3673)	\$292,191	\$2,546,598	12%
	Domestic Transmission Main (3585)	\$275,585	\$784,372	35%
	Recycled Transmission Main (3887)	(a)	(a)	12%
6	Jefferson Street Sidewalk Project (3883)	\$72,070	\$472,880	15%
7	2004-05 Pavement Overlay (3667-9)	\$116,464	\$2,878,380	4%
8	Traffic Signal at Alga Road and Xana Way (3893-1)	\$17,797	\$178,000	10%
9	Palomar Airport 12-inch Water Pipeline (3479)	\$39,769	\$93,179	43%
10	El Camino Real Sewer Tamarack to Chestnut (3891)	\$14,895	\$423,699	4%
11	Average Total Percentage of TCC For All CIP Projects	\$3,574,889	\$17,883,999	23 %

(a) Pipeline Cost for Project No. 3887 (Recycled Transmission Main) is included in the total for Project No. 3673 (Poinsettia Lane Reach C) Project.

## **ACTION PLAN**

Data will be collected during the fiscal year to compare the engineering staff and consultant costs to project construction costs. The data will be analyzed on an annual basis to determine cost effectiveness of capital improvement project delivery. Where engineering service costs exceed benchmark percentages, explanations will be provided in an effort to improve results in subsequent fiscal year analysis.

## POINT OF CONTACT

Bill Plummer (760) 602-2768, <u>Bplum@ci.carlsbad.ca.us</u>.

### Public Works

## CAPITAL IMPROVEMENT PROGRAM - CONSTRUCTION TIMELINESS

#### THE OUTCOME

A high level of customer satisfaction by delivering CIP projects on time.

## THE MEASUREMENT

The percent of projects completed on time. The information for project start and completion dates is obtained from the final progress payment prepared for each project. The contract completion date is the date of "substantial completion" in accordance with the contract documents and the approved construction schedule. This project milestone was chosen because it represents the customer service milestone of project delivery, which is not to be confused with the Notice of Completion (NOC) date, a legal noticing date for the purpose of notifying anyone who may have a claim against the project. Copies of the final progress payments for each of the projects completed in fiscal year 2004-2005 are available. This data is summarized below for reference. The analysis is based on comparing the "contract completion date" (substantial completion date) to the "actual completion date."

## WHAT THE DATA MEANS

Completing projects according to the approved contract schedule provides a high degree of customer service and satisfaction. Completion of projects on time allows public access to designated projects as scheduled.

## **DEPARTMENTS INVOLVED**

Engineering/Construction Management and Inspection, Engineering/Design Division, Client Departments.

## **BENCHMARK**

90% of CIP projects completed on or before the approved contract completion date.

## RESULTS

## Percentage of Projects Completed on Time

Benchmark	FY 04-05
90%	57%

#### **ANALYSIS**

The table below shows that four (4) out of the seven (7) projects were completed within the contract completion date, or 57% of the projects were completed within the project schedule. The benchmark requiring that 90% of the CIP

projects be completed within the schedule approved by the City Council for any given fiscal year was not met for fiscal year 2004-2005.

## COMPARISON OF REVISED COMPLETION DATE TO ACTUAL

	Original Completion	Revised Completion	Date of Substantial	Within	Completed Approved ledule
Project Name	Date	Date	Completion	Yes	No
Pavement Overlay of Palomar Airport Rd, El Camino Real, & Paseo Del Norte (3667-5)	04-19-2004	08-20-2004	08-11-2004		
Jefferson Street				X	
Sidewalk (3883) TS at Alga Road & Xana Way (3893-1)	09-08-2004		09-09-2004	X	X
Palomar Airport Rd. 12- inch Water Pipeline (3479)	08-22-2004		10-14-2004		X
2003/04 Street Sealing (3667-8)	10-19-2004	10-28-2004	11-01-2004		X
2004-2005 Street Overlay (3667-9)	11-15-2004	11-22-2004	11-18-2004	X	
ECR Sewer from Tamarack to Chestnut (3991)	11-05-2004	01-04-2005	12-22-2004	X	
TOTAL				4	3
Percent of all Projects Cor	Percent of all Projects Completed Within Approved Schedule				7%

Two of the three projects that were not completed on time, missed the actual completion day by one day or just a few days, which had no effect on customer service expectations. The Palomar Airport 12-inch Water Pipeline Project (3479) was delayed as a result of material delivery at the beginning of the project. Once the material was delivered to the contractor, he proceeded diligently. There are no recommendations to improve project delivery on these three projects.

## **ACTION PLAN**

Data will be collected during the fiscal year to determine the percent of projects completed on time. The data will be analyzed to determine the level of customer satisfaction by delivering CIP projects on time. Staff will collect data for fiscal year 2002-2004 and fiscal year 2003-2004 to provide additional historical data.

## POINT OF CONTACT

Skip Hammann (760) 602-7321, Shamm@ci.carlsbad.ca.us.

## Public Works

## CAPITAL IMPROVEMENT PROGRAM - CONSTRUCTION COST

#### THE OUTCOME

A high level of customer satisfaction by delivering CIP projects within contract budget.

## THE MEASUREMENT

The percentage of projects completed within or under budget at the time of contract award. The analysis compares the actual construction costs to the approved construction budget. The construction budget is defined as the contract award amount, combined with the construction contingency amount, as approved by Council. The actual construction cost is the amount paid to the contractor for all work in accordance with the original contract documents or as amended by Change Order.

## WHAT THE DATA MEANS

Completing projects within the approved project budget means that the City is managing construction in an efficient and effective manner.

## **DEPARTMENTS INVOLVED**

Engineering/Construction Management and Inspection, Engineering/Design Division, Client Departments.

## **BENCHMARK**

90% of CIP projects shall be completed within the approved construction contract budget.

## RESULTS

## Percentage of Projects Completed Within Approved Budget

Benchmark	FY 04-05
90%	100%

#### ANALYSIS

One hundred percent of projects completed in fiscal year 2004-2005 were within their approved construction budget. This result achieves the benchmark of at least 90 percent of the CIP projects completed during the fiscal year are within their approved construction budget.

Therefore, City staff is providing a high level of satisfaction delivering construction projects within budget.

## COMPARISON OF ACTUAL CONSTRUCTION COST TO APPROVED CONSTRUCTION BUDGET

## Projects with Notice of Completion Issued in 2004-05

Project Name	Total Actual Construction Cost w/ Change Orders Paid to Contractor (Dollars)	Original Approved Construction Budget with Contingency (Dollars)	Project Construction Cost Within Approved Budget  Yes No				
Traffic Signal at Calle Barcelona and Paseo Aliso (3894-1)	\$141,980	\$163,277	X				
Rehabilitation North Agua Hedionda Interceptor (3874)	\$179,940	\$206,931	X				
Carlsbad Water Recycling Facility (3675-2)	\$8,874,372	\$9,298,204	X				
O & M Avenida Encinas Sewer Rehabilitation	\$167,574	\$194,486	X				
Poinsettia Lane Ranch C (3673)	\$923,098	\$948,010	X				
Domestic Transmission Main (3585)	\$713,392	\$789,883	X				
Recycled Transmission Main (3887)	\$464,527	\$516,706	X				
Jefferson Street Sidewalk (3883)	\$454,488	\$495,179	X				
2004-2005 Pavement Overlay (3667-9)	\$2,878,380	\$3,224,901	X				
Traffic Signal at Alga and Xana (3893-1)	\$178,000	\$204,700	X				
Palomar Airport 12" Water (3479)	\$93,179	\$98,122	X				
El Camino Real Sewer (3891)	\$423,698	\$434,700	X				
Total Number of Projects With:	Total Number of Projects Within Approved Construction Budget						

The total number of projects completed in fiscal year 2004-2005 totaled twelve (12).

## **ACTION PLAN**

Data will be collected during the year to determine the percentage of projects completed within or under budget from the time of contract award. The data will be analyzed to determine the level of customer satisfaction by delivering CIP projects within contract budget.

## POINT OF CONTACT

Bill Plummer (760) 602-2768, Bplum@ci.carlsbad.ca.us.

The percent of projects completed within the approved budget totaled 100.0% (12/12=100.00%)

#### CODE ENFORCEMENT RESPONSIVENESS

## THE OUTCOME

A high level of responsiveness by Code Enforcement

## THE MEASUREMENT

This is a multi-modal approach combining:

**Time for case resolution:** The time increment required for closing complaints

**Recidivism rate:** The rate for similar complaints at the same address.

## WHAT THE DATA MEANS

**Time for case resolution:** Responding to Code Enforcement concerns is a fundamental service provided by the City. Complainants want their call to Code Enforcement to result in positive resolution of the case as soon as is reasonably possible. Resolving cases in a timely manner preserves neighborhood integrity and builds confidence in the value of local government. Code Enforcement has developed a complaint resolution measurement system that will track the time increments needed to resolve those complaints that have been found to be violations of the Municipal Code.

**Recidivism rate**: When open cases do not recur within a reasonable length of time, this could be an indication that the Code Enforcement department has created a level of understanding with the property owner about codes and ordinances, their importance to the well being of the community, and the quality of life in the community. A recheck of all open cases against the history for the prior three years will determine the recidivism rate for all code enforcement matters.

## **DEPARTMENTS INVOLVED**

Code Enforcement, Building, City Attorney, Planning

## BENCHMARK and RESULTS

The varying case types handled by Code Enforcement have differing degrees of importance relative to the amount of time needed to resolve those cases. There are twenty (20) different categories into which complaints are filed and tracked. Each type of case has a varying time increment at which 90% of the cases are resolved.

The ten most common complaint categories' standard for compliance and case closure is:

	Number of Cases Opened			Standard for 90% Compliance	R	% of	f Cases thin Stand	lard	
Type of Call for Service	2005	2004	2003	2002	-	2005	2004	2003	2002
Engineering/ROW	80	85	75	71	30 Days	81%	80%	88%	87%
Signs	101	117	118	132	30 Days	77%	79%	77%	79%
Expired Bldg Permit	20	28	48	53	60 Days	85%	82%	79%	79%
Zoning	99	77	50	97	60 Days	71%	90%	82%	78%
Vehicle Abatement	25	46	37	38	60 Days	76%	91%	89%	76%
Vehicle Zoning	49	64	79	84	60 Days	84%	92%	88%	75%
Building	212	198	220	208	90 Days	77%	82%	84%	73%
Garbage & Junk	112	107	131	104	30 Days	68%	64%	75%	73%
Business License	123	121	122	161	60 Days	89%	81%	86%	72%
Totals or Average	821	843	880	948		79%	82%	83%	76%

The industry recidivism rate (same violation at same address within 3 years) benchmark is unknown. The City's rate will become the baseline rate for future comparisons. Recidivism rate for FY-2005 at same address is:

Total Number of Cases		Number of Repeat Cases on Same Property	% Of Reopened Cases
2005	2612	212	8%
2004	2758	275	9%
2003	2302	221	9%
2002	1828	162	8%

## ANALYSIS

Case closure declined in five categories and minimally increased in the other four. This translated into a slight decrease in the average case closure time for the first time in four years. Recidivism rate dropped for the first time, perhaps demonstrating limited success of our efforts in educating the public on our codes.

## **ACTION PLAN**

Code Enforcement, The City Attorneys Office, Planning Staff, Police Department Personal and Storm Water Staff meet on a monthly schedule to discuss current issues and to ensure consistent enforcement. Code Enforcement staff will also meet independently on a monthly basis to review the declining categories to determine the cause and implement changes to correct this.

### POINT OF CONTACT

Patrick Kelley, Building and Code Enforcement Manager (760) 602 2716 pkell@ci.carlsbad.ca.us

## CODE ENFORCEMENT COST EFFECTIVENESS

### THE OUTCOME

An efficient Code Enforcement operation.

## THE MEASUREMENT

The specific measurement in this cost efficiency measure is: The number of cases closed in the fiscal year divided by the fully burdened cost for the Code Enforcement operation. Cases are those complaints found to be violations of a Municipal Code. Costs include the fully burdened salaries of the code enforcement officers, the clerical staff, allocated supervision, management, and Deputy City Attorney salaries, along with vehicle and telephone costs.

## WHAT THE DATA MEANS

The cost of providing Code Enforcement services will be tabulated each year for comparative purposes in order to assist in determining the optimal level of service in the community. The number of cases may vary, and the department is reviewing case-types to determine means by which caseloads can be lowered. This may be by providing more information to residents and businesses about codes and standards most commonly violated. This may result in the cost per case rising since some of the expenses are fixed.

## **DEPARTMENTS INVOLVED**

Code Enforcement

## RESULTS

Fiscal Year	Expenditures	Cases Closed	Average Cost per Case
2005	\$369,000	1066	\$346
2004	\$352,000	869	\$405
2003	\$332,000	987	\$336

## **BENCHMARK**

This is the second year for this measure, and subsequent years will be compared to this year's results. Benchmarking may be possible using the ICMA database.

### **ANALYSIS**

As the City continues to grow, the number of Code Enforcement cases is likely to increase. This past year there was no additional staff added to this department, and as a result, the cost per case decreased by about 14%.

## **ACTION PLAN**

We will establish a benchmark and perform a survey of comparable cities to see how we are doing.

## POINT OF CONTACT

Patrick Kelley, Building and Code Enforcement Manager, (760) 602 2716, <a href="mailto:pkell@ci.carlsbad.ca.us">pkell@ci.carlsbad.ca.us</a>

## CODE ENFORCEMENT CUSTOMER SATISFACTION

#### THE OUTCOME

A high level of Code Enforcement customer satisfaction.

## THE MEASUREMENT

Results of a customer satisfaction survey sent to Code Enforcement customers at the close of the particular case.

## WHAT THE DATA MEANS

The Code Enforcement Department sends a pre-addressed, postage-paid, mail-back survey to customers at the completion of cases. The survey asks customers to rate the Office Service, and Code Enforcement Officer Service on four-point scale (Excellent, Good, Fair, and Poor).

## **DEPARTMENTS INVOLVED**

Building.

## **BENCHMARK**

90% of survey respondents rank all Code Enforcement services as either excellent or good.

## **RESULTS**

Six surveys were returned ranking Office and Code Enforcement Services. Survey results were:

	BENCHMARK	FY2005	FY2004
Courtesy	90%	100%	92%
Timely Call Backs	90%	100%	75%
Professionalism	90%	100%	83%
Overall Service	90%	86%	100%

## **ANALYSIS**

The number of self-selecting surveys returned was low (7), although the results received were excellent. Surveys were sent out all year, and very few were returned. In the 7 surveys returned with 9 ratings each, there were only 2 marks below good or excellent (97% good or excellent). The two poor marks were from a complainant who was frustrated at a repeated violation at a neighbor's house.

## **ACTION PLAN**

More effort will take place at sending out surveys to ensure a higher number of returns next fiscal year. The Community Development Department is also having an audit performed this year by an outside firm. Code Enforcement Services will also be audited as part of this effort.

## POINT OF CONTACT

Patrick Kelley, Building and Code Enforcement Manager, (760) 602 2716 <a href="mailto:pkell@ci.carlsbad.ca.us">pkell@ci.carlsbad.ca.us</a>.

## REDEVELOPMENT SERVICES

#### THE OUTCOME

A quality shopping, working and living environment in the Village Redevelopment Area.

## THE MEASUREMENT

This is a multi-modal approach combining:

- Annual Property Values
- Annual Sales Tax
- Commercial Building Vacancy Rates at an Acceptable Level
- Redevelopment Permits Issued

## WHAT THE DATA MEANS

A redevelopment area can be determined to be successful when there is a program being implemented that removes blight and/or blighting influences (see definition below). The measures of this success can be tracked according to increases in property values and sales taxes, and maintenance of commercial building (retail and office) vacancy rates at an acceptable level. To measure the success of redevelopment in Carlsbad, the following indicators will be evaluated each year:

**Blight and influences:** Conditions, which cause a reduction or lack of proper utilization of an area. The blight can be physical or economic. Conditions may include inadequate public facilities, unsafe buildings, building code violations, deterioration of buildings, underutilization of property, depreciated or stagnant property values, high business vacancies, abandoned buildings, lack of necessary commercial facilities, and/or an excess of bars, liquor stores and/or other businesses that lead to problems of public safety and welfare.

**Annual Property Values:** Declining or stagnant property values may indicate a problem within an area and are typically the focus of redevelopment programs. Redevelopment activities are funded with tax increment, which is the incremental increase in property values within an area. Therefore, to measure success of a redevelopment area, we need to measure the increase in property values from year to year.

**Annual Sales Tax:** Similar to property values, declining or stagnant sales tax may indicate a problem within an area. Increases in sales tax demonstrate the health of the business community within an area.

**Commercial Building Vacancy Rates:** A significant percentage of vacant buildings within a redevelopment area create a blighting influence from both an economic and visual/aesthetic standpoint. Although a certain percentage of vacancy (i.e., 5% or less) is reasonable within an area and does not indicate a significant problem, increasing vacancy rates in commercial buildings may indicate a problem within an area.

**Redevelopment Permits Issued:** By measuring the number of redevelopment permits issued for projects which eliminate blight, we will be able to determine the level of interest in redevelopment and revitalization from the private sector and help to determine the overall success of the City's redevelopment programs and health of the area.

#### DEPARTMENTS INVOLVED

Housing and Redevelopment Department/Redevelopment Agency.

## **BENCHMARK**

In the Village Redevelopment Area:

- Achieve a 5% or higher increase in property tax values each year
- Achieve a 3% or higher increase in sales tax each year
- Maintain commercial building vacancy rate of (5%) or less each year
- Process at least five (5) new redevelopment permits each year that eliminate blight or blighting influences.

## RESULTS

Village Redevelopment Area

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	Desired			%
Benchmark	Increase	2003-2004	2004-2005	Change
Property Tax Values	5%	\$253,301,749	\$261,930,026	3%
Sales Taxes	3%	\$ 1,007,119	\$ 1,140,925	13%
Commercial Vacancy Rates	5% or less	5%	5%	N/A
# Redev. Permits Processed	5 or more	10 - Total	14- Admin	N/A

## **ANALYSIS**

The Village Area has experienced an increase of 3% in Property Tax Values over the last fiscal year. This did not meet the desired increase of 5%. This is primarily due to the fact that there were fewer property sales transactions in 2004-05 and the development projects under construction had not yet been completed by June 30, 2005 in order to be included in the final tax assessor data. Consequently, it is anticipated that a much larger increase will be experienced in FY05-06. The Village Area has experienced a 13% increase in sales tax dollars. This significantly exceeds the desired increase of 3%.

Fortunately for the Village Area, there has been an increase in the number of new shopping and dining opportunities that have assisted in the sales tax increase. The new businesses include Sonoma Valley Market, Merle Norman Cosmetics, the Poached Pear, Le Muse, and Las Olas Restaurant. The vacancy rates have remained constant at an acceptable industry rate (5% or less). In terms of redevelopment permits, the totals processed each year have varied. The permits being processed in fiscal year 2004-2005 include the Carlsbad Village Townhomes on Roosevelt Street, the Pine Avenue condominiums, and a new hotel on Carlsbad Boulevard.

In the last year, staff has experienced a significant increase in the number of developer contacts, preliminary reviews and new applications. Developers are sincerely interested in purchasing property within the Village and constructing new projects. This interest continues to signal a renewed interest in redevelopment activities within the Village.

In summary, the Village Area is continuing to grow from a financial health standpoint. The incremental growth in property and sales tax indicates that the market is gaining strength in the Village Area. The low vacancy rates combined with increasing sales tax indicates that the business climate remains healthy. In the last few years, and most specifically the last fiscal year of 2004-05, the Village has experienced a peaked interest from successful businesses operating in other areas. Those businesses have opened or will soon open new stores in the Village Area, adding to the diversity of businesses and helping to ensure more favorable sales tax revenue.

## **ACTION PLAN**

Staff will continue to implement programs that focus on revitalization and redevelopment of the Village Redevelopment Area. It is anticipated that within the next year a retail analysis will be completed for the Village Area. This analysis will consider the desires and demands of the local populations and determine the best type of retail to encourage within the Village Area. In the next year, staff will also complete a review of the development standards for the Village Area to determine if those standards are causing a constraint to new Appropriate revisions to the development standards will be development. Redevelopment Commission recommended to the Housing and consideration. Staff will also continue to work with property owners to implement improvements on their Village property, and to encourage them to lease property to desired businesses. To continue the success, staff will continue to work with the Chamber of Commerce's Downtown Enhancement Committee and other appropriate organizations to implement new programs and/or projects that will continue to revitalize the downtown area and ensure the sustainability of its financial health into the future.

## POINT OF CONTACT

Debbie Fountain, Housing and Redevelopment Director, (760) 434-2815, dfoun@ci.carlsbad.ca.us

## REDEVELOPMENT SERVICES COST

THE OUTCOME

An efficient Redevelopment Program that encourages private development and investment in Carlsbad's Redevelopment Areas.

## THE MEASUREMENT

The specific measurement in this cost efficiency measure is: The ratio of public dollar expenditures (for administration and projects) to private investment expenditures to successfully implement redevelopment activities and revitalize the Village and South Carlsbad Coastal Redevelopment Areas.

## WHAT THE DATA MEANS

A redevelopment area can be determined to be successful when there is a program being implemented which removes blight and/or blighting influences (see definition below). The measures of this success can be tracked according to the investment of public funding investments as incentives to subsequently encourage private funding investments into the area, which may result from the construction of new projects, rehabilitation of buildings or sale of property for investment purposes.

**Blight and Influences:** Conditions that cause a reduction or lack of proper utilization of an area. The blight can be physical or economic. Conditions may include inadequate public facilities, unsafe buildings, building code violations, deterioration of buildings, underutilization of property, depreciated or stagnant property values, high business vacancies, abandoned buildings, lack of necessary commercial facilities, and/or an excess of bars, liquor stores and/or other businesses that lead to problems of public safety and welfare.

### DEPARTMENTS INVOLVED

Housing and Redevelopment Department/Redevelopment Agency.

## **BENCHMARK**

Achieve a 1:10 ratio of public funding to private investment in the Village and/or South Carlsbad Coastal Redevelopment Area on an annual basis. For each \$1 of public expenditures, the goal is to demonstrate that there has been at least \$10 of private expenditures of investment in the area(s) per year.

## RESULTS Village Redevelopment Area

Benchmark	2004-2005	2003-2004
Public Funding	\$2,573,887	\$337,159
Private Investment	\$37,953,277	\$26,919,199
Ratio	1:15	1:79

## **ANALYSIS**

In 2003/04, the Village Redevelopment Area far exceeded the goal for the ratio (1:10) of public funding to private investment for the Village Area. In 2004/05, the Village Redevelopment Area again exceeded the goal.

The two primary projects in the Village Area this year are the Village by the Sea Mixed Use Project (65 condos/townhomes and 8600sf retail) and the Laguna Point Luxury Condominiums (21 total). In addition to representing new private investment in the Village Area, both of these projects are key to the continued revitalization effort for the North State Street Area. Several more projects are currently in the development/application phase, which will continue the increase in statistics for private investment in the Village.

From 1981 to 1995, the Redevelopment Agency had been making substantial investments (over \$20 million) to improve and beautify the Village Area. The Village Master Plan was adopted in 1995. An objective of the Master Plan was to begin to reduce the public investment while increasing private investment in the area. The funding of the Agency after 1995 was primarily for planning and land use regulations, and for stimulating greater private investment, which would provide benefits to the City as a whole. The investment ratios for the past two years continue to demonstrate the success of this change in investment focus.

## **ACTION PLAN**

Staff will continue to work with property owners and/or developers interested in development or redevelopment of various sites in the Village Area. It is staff's intent to continue to encourage private investment in both redevelopment areas by meeting with property owners and assisting with the processing of proposed projects. Staff is currently reviewing the development standards for the Village Area to determine if they are providing constraints to private investment. As appropriate, recommendations will be made to the Housing and Redevelopment Commission to revise standards, which are a constraint to private development. The South Carlsbad Coastal Redevelopment Area (SCCRA) has been mostly in planning stages for the last couple of years. It will continue in the planning process through the next year. Concurrently development applications are being processed for new hotels and mixed-use projects within the SCCRA. In the next year or two, the Agency will begin to consider this performance measure as related to the SCCRA in addition to the Village Area.

## POINT OF CONTACT

Debbie Fountain, Housing and Redevelopment Director (760) 434-2815, dfoun@ci.carlsbad.ca.us

## REDEVELOPMENT CUSTOMER SATISFACTION

#### THE OUTCOME

A highly positive experience for customers visiting the Village Redevelopment Area to shop, dine or play.

## THE MEASUREMENT

The specific measurement in this customer satisfaction measure is: The results of one or more customer satisfaction survey question(s) on the City of Carlsbad's annual public opinion telephone survey. The survey questions shall be as follows:

- How often do you visit the Downtown Village Area of Carlsbad?
- How would you rate your experience while visiting the Village Area?
- What would improve the quality of your experience when visiting the Village?

## WHAT THE DATA MEANS

A redevelopment area can be determined to be successful if the customers visiting the area indicate that they have had a positive experience while shopping, dining or playing. This measure will evaluate the success of redevelopment and other private investment activities in addressing deficiencies, which may be creating a less than positive customer experience, and/or continuing to maintain a high quality standard for the experience.

## **DEPARTMENTS INVOLVED**

Housing and Redevelopment Department/Redevelopment Agency.

## **BENCHMARK**

90% of all respondents to the City public opinion survey rank their Village experience as 7 or higher (on a scale of 0 to 10, with 0 meaning poor and 10 excellent). A ranking of 7 or higher will indicate a ranking of good or excellent.

## RESULTS

Fiscal Year 2003-04 was the first year for measuring the customer experience within the Village Area. The results of the survey indicate that 61.3% of the respondents visit the downtown Village Area at least once a week. Dining was the most common reason given for visiting the Village Area.

Respondents of the City Survey were asked to give their overall impression of Carlsbad Village by giving a rating from 0 to 10, with 0 meaning poor and 10 meaning excellent. The average rating was 7.99. A total of 86% of the

respondents gave the Village a rating of 7 or higher, which is in the good to excellent range.

The City survey for 2004-05 did not include the above questions. Therefore, we do not have any new statistics on customer satisfaction for this year. The questions will be asked every other year. Therefore, we will have new statistics in fiscal year 2005-2006.

## ANALYSIS

No new statistics for 2004-05 for analysis purposes. The customer satisfaction questions will appear on the next citizen survey for 2005-2006.

## **ACTION PLAN**

Staff will continue to work with the Village businesses to promote the area as a desirable shopping and dining experience. Staff will also work with Village property owners to continue the effort to revitalize the area and to recruit new businesses that may have greater appeal to local residents, especially those in the southern section of the City. These actions are intended to increase the frequency of visits to the Village by local residents and to improve the overall impression score for the Village Area. These actions will ensure the long-term sustainability of the area as part of the City of Carlsbad by appealing to local residents as well as visitors.

In June 2005, the Redevelopment Agency entered into an agreement with the Community Land Use and Economics Group to complete a retail analysis and "wants and needs" study for the Village Area. This study will be complete by June 30, 2006. It will provide additional information on the retail sales void in the Village and new retail uses desired by visitors/shoppers. It will assist in the effort to improve the customer experience in the Village.

## POINT OF CONTACT

Debbie Fountain, Housing and Redevelopment Director, (760) 434-2815, dfoun@ci.carlsbad.ca.us

## SECTION 8 PROGRAM ASSESSMENT

#### THE OUTCOME

Maximize rental assistance opportunities for low-income residents of Carlsbad.

## THE MEASUREMENT

The rating from the United States Department of Housing and Urban Development for the City's Section 8 rental assistance housing program.

## WHAT THE DATA MEANS

The United States Department of Housing and Urban Development (HUD) has instituted a Section 8 Management Assessment Program. Using 15 adopted indicators; HUD evaluates and certifies a local agency's success of administering individual federally funded housing programs. HUD's ratings include "High Performer," "Standard Performer," or "Troubled Performer." Repeated failure to secure a HUD rating of "Standard Performer" or higher can jeopardize a local agency's continued federal funding for its Section 8 rental assistance-housing program.

## **DEPARTMENTS INVOLVED**

Housing and Redevelopment – Section 8 Division.

## **BENCHMARK**

Achieve a HUD rating of Standard Performer or higher 100% of time.

## **RESULTS**

For FY 2005, the Housing Agency received a rating of Standard Performer.

## **ANALYSIS**

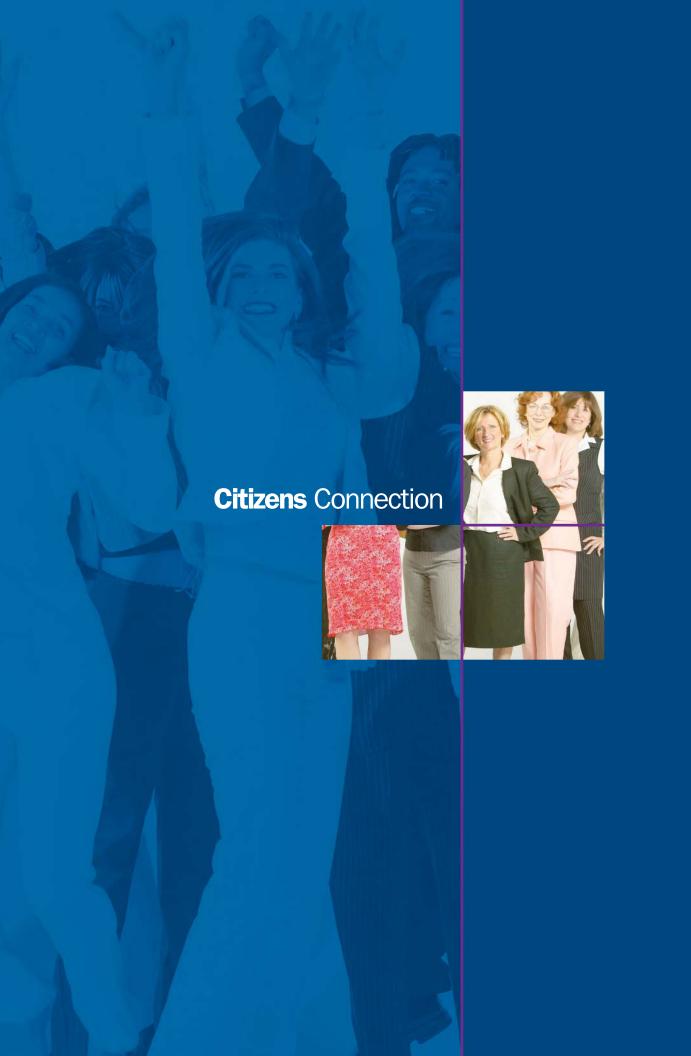
The Housing Agency has met the benchmark by receiving a rating of Standard Performer for FY 2005 and continues to be considered successful in administering the Section 8 Rental Assistance Program.

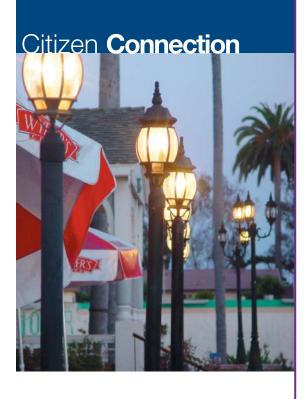
## **ACTION PLAN**

Continue to evaluate the 15 indicators and identify the areas where the agency can improve in an effort to attain "High Performer."

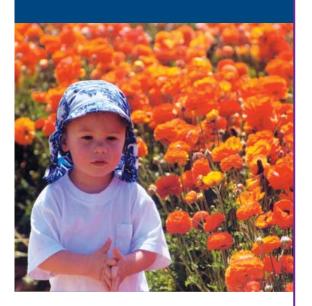
## POINT OF CONTACT

Debbie Fountain, Housing & Redevelopment Director (760) 434-2935, <a href="mailto:dfoun@ci.carlsbad.ca.us">dfoun@ci.carlsbad.ca.us</a>.





Be a city that embraces community connectivity through the effective use of technological and interpersonal mediums Be a city that embraces
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technological
and interpersonal
mediums



## **Citizen Connection Indicators**

- Volunteer Program Service Delivery
- Volunteer Program Cost Effectiveness
- Volunteer Satisfaction

## **Management Goals**

- Cable Re-Franchisement Team
- Volunteer Assistance
- Presentation Technology Goal
- CCPS Engagement
- Municipal Wireless Connectivity
   Needs Assessment

# Why is it important to Carlsbad?

Adopted for the first time in 2004 by the City Council Citizen Connections as a strategic goal addresses the City's focused effort to improve ways for citizens to interact both technologically and interpersonally. The intent of this goal is to preserve and strengthen the fabric of the community, which should advance the quality of life enjoyed by the residents of Carlsbad.

## **Volunteer Program**

With the development of the City's Volunteer Coordinator position in 2003, the City has begun the process of providing high-level coordination in building a comprehensive Volunteer program that encompasses the City as a whole. This past year the Volunteer program was able to utilize almost 50,000 hours of volunteer service, which comprised more than 1,000 volunteers and represents a value to the City of approximately \$1 million. It is anticipated that the volunteer program will continue to develop and grow over the coming years.



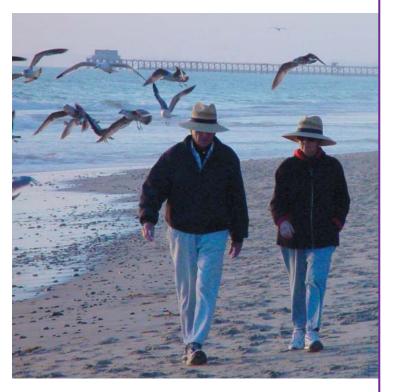
## **Public Opinion Survey**

Included in the 2005 Public Opinion Survey was the question "How would you rate Carlsbad in terms of the opportunities available for citizen involvement? On a ten point scale, with ten being the highest, residents rated the City 7.69. Also on the Public Opinion Survey was the question "How would you rate Carlsbad in terms of the citizen's sense of community and civic pride?" Again the City received positive ratings 7.94

These two statements are evaluations of how well the city promotes residents' interest in participation in community activities and their identification with the community. In 2005 this rating saw almost a full point increase over 2004. While these ratings are slightly lower than the ratings for other questions regarding general impressions of the community, the City is showing improvement and will continue to develop civic involvement opportunities for its residents.

## What does this mean to Carlsbad?

Citizen Connection is a developing council goal that represents the City's transition from an organization focused on building the "hardscape" of the City to an organization that spotlights the nurturing of the community character and spirit.



BENCHMARK	2005
Overall recruitment and orientation process	75%
Training recevied to perform volunteer assignment	74%
Supervisor in providing guidance and feedback	81%
Level of respect and recognition received	91%
Overall volunteer experience with the City of Carlsbad	92%

## **Volunteers**

In the fiscal year 2004/2005, volunteers donated 46,887 hours of time. Using the Independent Sector's calculations adjusted for inflaction, that time was valued at an attention-getting \$951,422.32—a gift to the City of Carlsbad of almost \$1 million.

The table to the left lists the percentage of City volunteers that rate the mentioned aspects of the volunteer experience as good or excellent.

## Citywide

## SERVICE DELVERY VOLUNTEER PROGRAM

#### THE OUTCOME

A prompt and efficient process to involve potential volunteers.

## THE MEASUREMENT

Volunteerism has not been exempt from change. An increased reliance on technology and a reduction in long-term commitment are apparent when reviewing volunteer trends. The 21st century volunteer will find often a volunteer assignment using the Internet. Communication and response are expected to be immediate.

Staff will measure the number of days from first contact to response and from orientation to referral to volunteer position. The data will track the efficiency of the procedures used to engage potential volunteers.

## WHAT THE DATA MEANS

A prompt response to an expression of interest from a potential volunteer is essential to top-quality service. Volunteers who define the initial process as prompt and efficient are more likely to volunteer for the organization. Staff created a Pre-Tracking Database to track response time to volunteers during the process of engagement.

Potential volunteers are entered into the database when they first express an interest. Then tracked at each step of the process. Those steps are:

- Initial Contact to Response
- Response to Orientation
- Orientation to Referral to Department

## **DEPARTMENTS INVOLVED**

Citywide

## **BENCHMARK**

ACTIVITY	BENCHMARK
Initial Contact to Response	<3 days 90% of the time
Offered Orientations	1 per month
Orientation to Referral	<3 days 90% of the time

#### RESULTS

ACTIVITY	BENCHMARK	2005
Initial Contact to Response <3 days	90%	95%
Offered Orientations	1 per month	Yes
Orientation to Referral <3 days	90%	90%

#### **ANALYSIS**

Potential volunteers receive a very prompt response to an indication of interest. An auto-reply has been added to go out immediately to those who indicate an interest via our website. One hundred percent of the time, an email or phoned response is given to all volunteers who express an interest within 3 days.

A Pre-Tracking Database has been designed and implemented to keep track of the potential volunteer throughout the involvement process. Potential volunteers are immediately invited to an orientation usually offered within 14 days. They continue to be invited to the next three orientations. Once the potential volunteer attends an orientation, the application is forwarded on to the relevant department within 3 days 90% of the time.

#### **ACTION PLAN**

Continue to work with departments to find ways to engage potential volunteers at their earliest convenience.

# POINT OF CONTACT

Sue Irey (760) 434-2820, Sirey@ci.carlsbad.ca.us.

## Citywide

#### **VOLUNTEER PROGRAM COST**

#### THE OUTCOME

A cost-effective volunteer program.

#### THE MEASUREMENT

Expenditures for volunteer operations will be compared to the calculated value of hourly volunteer time and the value of volunteer support in the community. The hourly calculation is established for California by the Independent Sector and derived from the annual President's Economic Report.

## WHAT THE DATA MEANS

In the fiscal year 2004/05, volunteers donated 46,887 hours of time. Using the Independent Sector's calculations adjusted for inflation, that time was valued at \$951,422. However, this gift of almost \$1 million value has associated costs.

There has been a tendency to subsume the volunteer program costs into our general operating budget. While we are proud of the contribution of volunteers and the fact that volunteers contribute without expectation of monetary reward, we must confront the myth of "free" volunteers. Volunteers cost the City time, money and effort and we must consider whether or not these costs are justified.

There are direct costs in the Volunteer Program budget and for volunteer recognition events held throughout the City. There are indirect costs in staff time associated with training and involving volunteers. These costs are shared across different functions and departments and have not been tracked historically. Equipment costs are often difficult to quantify as the equipment is often shared with paid staff. Hard data was difficult to gather because staff had not previously been asked to "break out" their time and effort spent involving volunteers. However, each department sent in data and will have a greater ability to present valid measures next year.

Also, the indirect value in terms of volunteer support in the community is an additional consideration. The support of volunteers to who speak directly to their friends and neighbors about City programs is an extremely valuable in terms of community outreach. This Cost Effectiveness analysis does not include measurement of that important benefit. Staff hopes to find a valid measurement tool in the future.

#### DEPARTMENTS INVOLVED

Citywide

#### BENCHMARK

For every \$1 invested in the volunteer program, the City receives \$11.10 in return.

#### RESULTS

We have begun to quantify the cost of the volunteer program. To the extent that the City rallies behind the vision of an engaged citizenry – a citizenry that recognizes the opportunities to be part of the solution – it will be necessary to build up the capacity to accommodate these gifts of time and service.

07/01/2004-06/30/2005

	Adult Literacy	Arts	General	Library	Police & Fire	Recreation	Senior Center	Trails	Avg.	Total
No. of volunteers	103	47	336	152	147	135	165	80		1,165
No. of hours	6,315	1,016	1,595	3,644	13,652	7,707	12,225	733		46,887
Avg. hrs per volunteer	61	22	5	24	93	57	74	9	43	
Avg. value per volunteer	\$1,244	\$439	\$96	\$486	\$1,885	\$1,158	\$1,503	\$186	\$875	
Cost Impacts	\$114,160	\$12,880	\$87,160	\$32,359	\$75,000	\$6,500	\$4,545	\$16,250		
Avg. expenditure per volunteer	\$1,108	\$274	\$259	\$213	\$510	\$48	\$28	\$203	\$330	
Avg. cost per volunteer hour	\$18.08	\$12.68	\$54.65	\$8.88	\$5.49	\$0.84	\$0.37	\$22.17		
Ratio - Avg. value/ Avg. expenditure	1.1	1.6	0.4	2.3	3.7	24.1	54.6	0.9	11.1	

<sup>\*\$</sup> Value of a Volunteer Hour \$20.29

#### POINT OF CONTACT

Sue Irey (760) 434-2820, Sirey@ci.carlsbad.ca.us.

## Citywide

#### CUSTOMER SATISFACTION VOLUNTEER PROGRAM

#### THE OUTCOME

Volunteers express a high level of satisfaction with their volunteer involvement.

#### THE MEASUREMENT

A goal team was formed to design, distribute and analyze a volunteer satisfaction survey. The volunteer satisfaction survey measured the satisfaction of volunteers about several aspects of the volunteer program and their volunteer experience. In January 2006 the survey was sent out to 801 persons. Results are based on the 144 that were returned (18% of total sent).

#### WHAT THE DATA MEANS

The data assessed the current strengths and weaknesses of the City's volunteer program from the perspective of the volunteers. Recommendations were given based on the analysis of the data gathered.

#### **DEPARTMENTS INVOLVED**

Citywide

#### **BENCHMARK**

The following table lists the percentage of City volunteers that rate the mentioned aspects of the volunteer experience as good or excellent. Since this is the first year of the survey, no prior benchmark exists.

	2005
Overall recruitment and orientation process	75%
Training received to perform volunteer assignment	74%
Supervisor in providing guidance and feedback	81%
Level of respect and recognition received	91%
Overall volunteer experience with City of Carlsbad	92%

#### RESULTS

In response to the survey question asking volunteers to rate the overall volunteer recruitment and orientation process, 75% rated it positively (4 or 5 on a 1-5 scale).

A majority of the respondents (74) rated their volunteer training positively. Over 80% gave positive ratings to their supervisor for providing guidance and feedback.

Over 90% gave positive ratings about the level of respect and recognition they receive as a volunteer.

92% of respondents gave positive ratings about their overall volunteer experience at the City of Carlsbad and 93% of the volunteers indicated that the Carlsbad volunteer experience met their personal expectations.

#### ANALYSIS

Overall, the responding volunteers are very positive about their experience. An impressive 92% rated their overall volunteer experience as Good or Excellent. They enjoy what they are doing and feel rewarded. About half would like to take development classes.

However, a few negative comments need to be taken seriously: sometimes volunteers are not used to their full potential and feel underutilized. Some would like more guidance from their supervisor or something like a performance measure. Also, there is a need for more information about volunteer opportunities and the development classes.

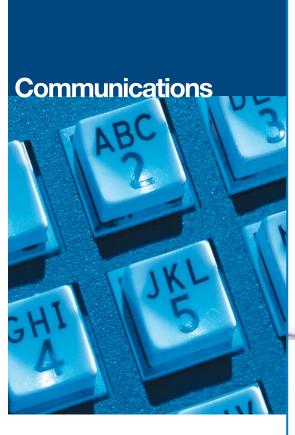
#### **ACTION PLAN**

Develop activities and programs to address weaknesses identified in survey.

#### POINT OF CONTACT

Sue Irey (760) 434-2820, Sirey@ci.carlsbad.ca.us





Ensure that community members, Council, and staff are well informed, continuing to be a more responsive government while providing a high level of citizen confidence in its government.



# Why is it important to Carlsbad?

By creating and maintaining a balanced circulation system, the City is able to provide transportation choices and improvements to mobility.

The ability to move people and goods is essential to the economic vitality and quality of life in a region. Business location and expansion decisions, consumer choices regarding goods and services, and land values are largely a function of accessibility and are directly related to quality of life.



# **Communication Indicators**

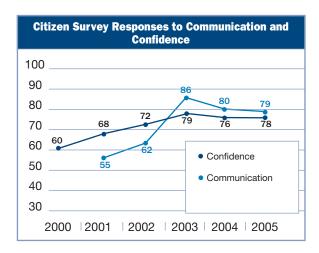
- Citywide Communications
- Communications Cost per Capita
- Confidence In Local Government
- Requests for Action
- Information Responsiveness

Communications continues to be a major area of effort and focus for the City. The City evaluates its communication efforts based on the level of information residents feel they have, the cost to provide information, the level of confidence residents have in local government, and the way in which the City responds to citizen requests.

A correlation has been established between the residents' ratings of communication and the their level of confidence in their City government - that is, the higher ratings that citizens give the City's communications, the higher they rate their level of confidence in the City organization.

# **Current Year Results**

Results from this year's Citywide survey show that both citizens' feelings regarding Communication and Confidence stayed the same as last year (79% & 78% respectively). Communication expenditures per capita increased from the prior year (\$10.15 vs. \$13.55), however, staff believes this increase is due to more accurate cost reporting and is comparable to what the City has spent in this area over the past several years. The primary reason for the cost increase was the inclusion of the City's website, which accounts for more than \$2.50 of the per capita expenditure, or nearly 20% of overall communication expenditures.





# **Trends & Observations**

While the City has not yet reached its benchmark in any of the categories, the five year trend shows a significant initial increase in results over the first three years followed by a recent leveling off. This trend is consistent in all aspects of communications, including costs when adjusted for accuracy, and though results have not improved in the last two years, ratings remain positive. Staff will continue to identify and evaluate more effective methods of outreach. This year the City developed a new performance measure on Request for Actions, and expects future results to provide valuable information as to how successful the City manages its customer relations.

Based on the City's capital construction program and increasing public expectations, there appears to be the need to further the City's communication and outreach efforts in the near-term. As is the case in other areas, the primary challenge facing the City will be to meet this increasing demand (scope, volume, and responsiveness) in a cost-effective and efficient manner.

#### Citywide

#### CITIZEN/CUSTOMER RESPONSE TIMES

#### THE OUTCOME

A well-informed citizenry with a high level of confidence in local government.

#### THE MEASUREMENT

City of Carlsbad responds to citizen requests in a timely manner.

#### WHAT THE DATA MEANS

A key function of local government is the ability to identify and address citizen and customer concerns in a timely fashion. By resolving customer requests appropriately, the City can positively impact the public's confidence in local government.

#### DEPARTMENTS INVOLVED

Citywide.

#### **BENCHMARK**

90% of Request for Actions are resolved within the predetermined timeframes.

#### RESULTS

	Benchmark	2005	
% of cases resolved	90%	78%	

#### **ANALYSIS**

A key function of local government is responding to a variety of citizen and customer concerns and requests in a timely fashion. This is the first year that the City has tracked how efficiently it is able to resolve customer issues based on preset timeframes. In 2005 (from November 2004 - October 2005), the City opened more than 4400 Requests for Actions. Of these, approximately 3700 required some type of response from the City. Staff was able to respond in a timely manner in 2900 of those cases. This results in an overall responsiveness rate of 78%.

There has been increased management oversight of the RFA process, and staff anticipates that as the City's population increases, so too will the number of concerns and complaints that the City receives.

# **ACTION PLAN**

Staff will continue to develop this measure and work with departments to find ways to improve resolution and reporting processes. Ascertain relevant customer service providers to compare against.

# POINT OF CONTACT

Joe Garuba (760) 434-2820, <u>Jgaru@ci.carlsbad.ca.us</u>.

#### Citywide

#### **CITYWIDE COMMUNICATIONS**

#### THE OUTCOME

A well-informed citizenry with a high level of confidence in local government.

#### THE MEASUREMENT

Survey results to the question in the citywide survey that asks, "Using a scale of 0 to 10, where 0 means poor and 10 means excellent, how would you rate the job the city does in providing you with information about issues that are important to you?"

#### WHAT THE DATA MEANS

The dissemination of information to the public is a key function of local government. Citizens who feel more informed, and are able to access information about the City when and where they need it should result in greater understanding of local issues and positively impact the public's confidence in local government.

#### DEPARTMENTS INVOLVED

Citywide.

#### BENCHMARK

90% of respondents rate 6 or greater on a scale of 0-10.

#### RESULTS

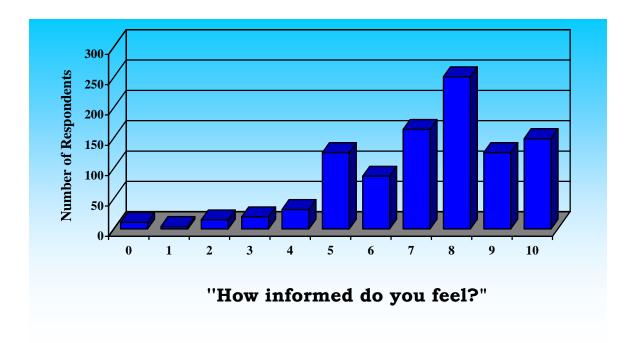
Benchmark	2001	2002	2003	2004	2005
90%	55%	62%	86%	80%	79%

#### ANALYSIS

This is the fifth year residents have been asked how the City is doing in providing them with information on issues that are important to them. As shown through previous surveys, there appears to be a correlation between the way residents rate their level of communication and their impressions of land use decisions, overall services, and confidence in local government.

While the City has failed to achieve the benchmark in any given year, the ratings for this measure have stayed relatively consistent over the past three years, and reflect a significant net increase over the past five years.

Something to note this year is the emerging difference in ratings based upon the geographic location of the residents and their age.



The above chart illustrates the breakdown of the survey respondents and how well informed they believe they are. As is evident in the graph, the vast majority of the respondents give the city positive scores in its communication efforts.

This year the citywide survey included a question asking how people would want to receive information. The results of the 2005 survey question are reflected in the chart below.

Information Method	Average Rating
Community Services Guide	6.7
Monthly E-mail newsletter	6.1
Quarterly Newsletter via Postal Mail	6.1
News Highlights in Utility Bill	5.9
Quarterly E-mail Newsletter	5.8
Monthly Newsletter via Postal Mail	5.6

As is evident, several tools that the City uses for information dispersion are not included in the results. This is due in large part to the way the survey question was framed, and is part of the ongoing process to clearly identify where and how citizens would like to receive city-related information.

Citizen access to the internet continues to be high with nearly 90% of the respondents saying they have some sort of access in their homes. Almost 80% of those homes with internet have a high-speed connection. The internet is a vital component to the City's communication efforts, which ultimately provides a fast yet relatively inexpensive way to deliver information.

#### **ACTION PLAN**

While the City has begun the process to better define how people want to receive their information, there is still much research and analysis needed in this area. Staff has identified the need to conduct a more comprehensive evaluation on the different methods of communication and their effectiveness.

Over the past several years, the City Council has identified communication as one of its Strategic Goals. Staff continues to develop and implement an overarching strategy that will provide a coordinated approach to implementing and measuring the city's communications efforts.

#### POINT OF CONTACT

Denise Vedder (760) 434-2820, <u>Dvedd@ci.carlsbad.ca.us</u>.

#### Citywide

#### CITYWIDE COMMUNICATIONS COST PER CAPITA

#### THE OUTCOME

A cost effective external communications program.

#### THE MEASUREMENT

Citywide communication costs per capita.

#### WHAT THE DATA MEANS

The dissemination of information to the public is a key function of local government. A more informed public should result in greater understanding of local issues and positively impact the public's confidence in local government. This measure evaluates the cost per capita spent by the City on communication.

#### **DEPARTMENTS INVOLVED**

Citywide

#### **BENCHMARK**

Base Year (2004) plus Consumer Price Index (3.4%)

#### **RESULTS**

	2002	2003	2004	2005*
Population	88,400	92,400	94,400	95,150
Expenditure	\$586,000	\$984,900	\$958,711	\$1,290,000
Benchmark Per Capita	\$6.65	\$6.94	\$7.20	\$7.45
Actual Per Capita	\$6.65	\$10.65	\$10.15	\$13.55

<sup>\* 2005</sup> is the first year that the cost of the City's website was included.

#### **ANALYSIS**

This measure provides the ability for staff to better evaluate the cost in conjunction with the effectiveness of the City's many communications efforts. This measure takes into account the costs outlined in the communication budget as well as other communication endeavors sent from the City. The City volunteer coordinator and associated expenses are also included in the communications budget. As the City's communications program has become

more sophisticated, and more programs are either consolidated or, partnerships between departments occur, better tracking of costs has ensued, which allows for a more accurate, detailed understanding of expenses related to communications.

# Included in this analysis:

- Communications budget (salaries, video production, calendar, see budget for full details)
- City Website
- Community Services Guide printing, mailing, graphic design
- Public affairs and community outreach for public works related to specific projects)

#### Not included:

- Environmental outreach
- Recreation spring camp guide
- Arts department newsletter
- Water bill stuffers
- Brochures completed by individual departments.

A significant change in the expenditures this year is that the cost of the City's website (approximately \$250,000, or \$2.60 cents per capita) has been included for the first time. It is important to note, however, that while costs for the website are reflected for the first time this year, the site costs are not increasing and expenses are consistent with those in prior years. The website is proving to be more and more the primary tool for information and communication, and will continue to be an area of emphasis for the foreseeable future. While the overall per capita cost grew by a significant amount, staff believes that this year is a better representation of the actual amount spent on communications.

Results in the Citywide survey show that residents continue to rank communication at a fairly high level, which demonstrates by proxy the effectiveness of the City's communications.

#### **ACTION PLAN**

Staff has developed an overall Communication Strategy, and will continue to identify how best to allocate City resources to meet Council's objectives. Staff will continue to evaluate cost effectiveness of various communication tools and adjust accordingly. Staff will also further analyze this year's survey, in which specific questions on how residents would like to receive their information was included, in order to better identify the effectiveness and emphasis of ongoing communication efforts.

#### POINT OF CONTACT

Denise Vedder (760) 434-2820, Dvedd@ci.carlsbad.ca.us.

#### Records Management

#### RECORDS INFORMATION RESPONSIVENESS

#### THE OUTCOME

Timely and accurate dissemination of information to aid in decision-making.

#### THE MEASUREMENT

This is a multi-modal approach combining:

**Time for legislative documents:** A measurement of how quickly Council's weekly legislative documents are available for internal and external customers.

**Use of on-line Document Management System:** A measurement of the number of times that both external and internal customers visit the Document Management System site.

#### WHAT THE DATA MEANS

**Time for legislative documents:** Managers and the City Council depend on accurate and timely processing of legislative documents such as Agreements, Resolutions, and Ordinances. City projects can be stalled without timely attention to processing citywide documents.

From July 1, 2005 to date Records Management has achieved a 95% on-time record in having legislative documents from Council Meetings available on the DMS by the following Friday.

**Use of on-line Document Management System:** The use of the Document Management System by both City employees and the public are critical to providing top quality service. By analysis of how many people are using this service, and understanding the timeframes of usage, we can gauge the effectiveness of this service.

At the request of Records Management, the IT Department periodically runs reports regarding the usage of the DMS system distinguishing both internal city use and external usage. The last report, run from the September 26, 2005 to October 7, 2005, offers the following measurements:

Time Frame	Customers	User Number	Search Number
9/27/05-10/7/05	Internal	109	3,848
9/27/05-10/7/05	External	83	1,630

# **DEPARTMENTS INVOLVED**

Records Management, Information Technology.

# **BENCHMARK**

To be determined.

# POINT OF CONTACT

Lorraine Wood, City Clerk (760) 434-2880 x 2970, Lwood@ci.carlsbad.ca.us.

## Citywide

#### CONFIDENCE IN CITY GOVERNMENT

#### THE OUTCOME

High level of citizen confidence in the City's ability to positively affect the community.

#### THE MEASUREMENT

Survey results to the question in the citywide survey that asks "How confident are you in the Carlsbad City Government to make decisions which positively affect the lives of its community members?"

#### WHAT THE DATA MEANS

Evaluating citizen's confidence in the local government in conjunction with other service rating measures, the City can determine those actions that have a positive impact on the perception of the effectiveness of local government.

#### **DEPARTMENTS INVOLVED**

Citywide.

#### **BENCHMARK**

90% of respondents rate confidence 6 or greater on a 0-10 scale.

#### RESULTS

Benchmark	2000	2001	2002	2003	2004	2005
90%	60%	68%	72%	79%	76%	78%

#### **ANALYSIS**

This is the sixth year that the City has asked its residents how confident they are in local government effectiveness. During this timeframe, the percentage of the respondents who have a positive confidence level in local government has increased by 18 percentage points. This trend seems to show some signs of leveling off, with positive responses essentially unchanged over the past three years.

In evaluating what drives Citizen confidence, staff has determined that there are numerous components within the City's sphere of influence that impact this rating. The degree of information that the residents feel they have the citizen's perception of how effective the City uses land have an impact on their confidence rating in the City. Land use has a greater impact in affecting the confidence question than does communication, but one may be a function of the other as citizens may not know our land use plan if we aren't

communicating effectively on this subject. In 2004, citizen ratings of land use were essentially unchanged and slightly lower when rating communication. Staff believes that these corresponding decreases as well as other significant factors such as major construction projects in the City are reflected in the lower citizen confidence rating.

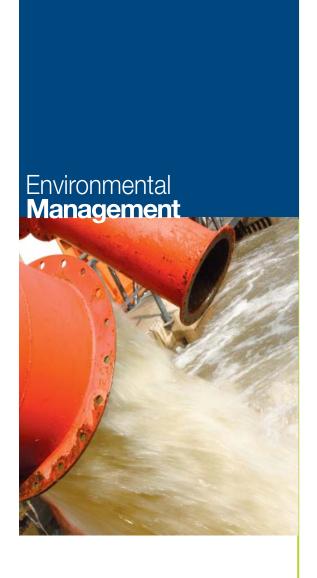
#### **ACTION PLAN**

Because this measure represents a critical outcome of the City's effort and while the decrease in ratings is nominal, Staff will continue to monitor this rating and will work to identify and implement ways in which to positively affect both communication and land use perceptions, it is moving in a direction counter to the City's goal.

# POINT OF CONTACT

Joe Garuba (760) 434 2820, <u>Jgaru@ci.carlsbad.ca.us</u>.





Be an environmentally sensitive community by focusing on conservation, storm water, sewage collection and treatment, solid waste, and cost effective and efficient use of energy including alternative energy sources

# Why is it important to Carlsbad?

With 42 square miles, 90,000 residents, three lagoons, six-plus miles of Pacific Ocean coastline and thousands of plant and animal species, protection and conservation of this natural environment is essential for a high quality of life. Most environmental issues have an impact beyond our city boundaries. It is essential that we coordinate efforts with citizens, outside agencies and industries to promote cooperative solutions to regional environmental issues. Cooperatively we need to research alternatives, promote conservation and continually protect the health and safety of those who live, work and play in the Community. By ensuring proper transmittal of wastewater, disposal of trash and aggressively monitoring potential pollutants, we help keep our environment clean and safe.



# Goals

- Solid Waste Program Enhancements
- Solar Electricity
- Buena Interceptor Sewer
- Vista/Carlsbad Interceptor Sewer, Reaches 13-15
- Storm Water Maintenance Management Goal

# **SEWER**

# **Sewer Indicators**

- Sewer System Service Delivery
- Sewer Cost Efficiency
- Sewer Service Customer Satisfaction
- Growth Management Sewer Collection System

# **Current Results**

- Planned sewer main cleaning continues to exceed city maintenance goals.
- Operations of the sewer system are cost effective as we continue to perform within benchmark
- Continue to receive high customer satisfaction ratings
- The number and volume of sewage spills increased over previous years
- The percent of recaptured sewage spills decreased over previous years.
- Planned pump station maintenance did not meet city maintenance goals.
- In compliance with the sewer collection system growth management standard.



# **Trends and Observations**

Public Works continues to analyze alternative work methods and identify possible contracting opportunities to improve the balance between scheduled versus unscheduled maintenance to ensure maintenance standards are achieved.

		% Maintenance Complete	
Activity		FY 2004	FY 2005
Sewer Main Cleaning	Benchmark		
Priority Sewer Every 3 Months	90%	103%	86%
Priority Sewer Every 6 Months	90%	186%	108%
Priority Sewer Every 12 Months	90%	93%	80%
VCP Sewer Lines Every 24 Months	90%	100%	100%
PVC Sewer Lines Every 36 Months	90%	100%	100%

# SOLID WASTE Solid Waste Indicators

- Solid Waste Cost
- Solid Waste Diversion
- Solid Waste Customer Service and Satisfaction

# **Current Results**

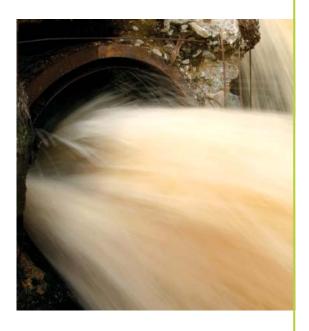
- The solid waste program continues to report consistent results in all three areas – customer service, service delivery and cost.
- For the first time in seven years, solid waste rates increased. However, the rates continue to rank among the lowest in the County.
- The state mandated diversion requirement of 50% was exceeded the 2004 diversion rate is projected at 57%.
- Customer service ratings are consistent with prior year results.



## **Trends and Observations**

- The solid waste program continues to introduce enhancements to the citizens of Carlsbad. During FY 2006 three new programs will be available to residents including door to door Household Hazardous Waste (HHW) collection; composting and an HHW one day special collection event.
- The City maintains a good working relationship with the contractor responsible for operating this program. Through informal negotiations, the vendor has increased bulky item pick-up services and will expand recycling efforts by accepting mixed paper at curbside in the Spring of 2006.
- Citizen complaints are tracked in the City's RFA system, the majority of the complaints received in the area of solid waste are related to the limited recycling program the City offers. The introduction of enhancements to this particular program would most likely result in increased monthly rates to the residents. Staff continues to analyze this area, ensuring that enhancements to the program are cost effective.
- Hazardous Waste Collection is a service that typically receives some of the lowest customer service ratings (66% good or excellent). Two new programs will be introduced in 2006, which may have a positive impact on these ratings in the future.

Customer Service Ratings								
YEAR Trash Collection Recycling Household Hazardous Collection Waste Collection								
Benchmark	≥90%	<u>&gt;</u> 90%	≥90%					
2003	88.6%	82.7%	69.5%					
2004	87.3%	81.5%	68.2%					
2005	87%	83%	66.3%					



# STORM WATER Storm Water Indicators

- Storm Water Protection Cost
- Storm Water Service Delivery
- Storm Water Protection Customer Service and Satisfaction
- Growth Management Drainage
- Growth Management Waste Water Treatment Facilities

# **Current Results**

- Response time goals were met for on-site investigation of reports of illegal discharge into the storm drain system. In over 90% of all active cases (12 cases in 04-05), a Storm Water Protection staff member was dispatched within 30 minutes.
- Storm Water personnel operate efficiently, three of the four components of the cost measure are the lowest when compared to our benchmark partners.
- The water quality measure is currently focused on Agua Hedionda Lagoon and Agua Hedionda Creek as a pilot program. Staff monitors water

quality of one site at the creek upstream of the lagoon, and three sites on the lagoon. Samples from the lagoon sites rated good or fair for all three measures, namely fecal coli form bacteria, dissolved oxygen, and turbidity. The creek site rated fair for fecal coli form, but it exceeded the benchmark six out of 12 monthly samples.

■ Planned drainage maintenance activities did not meet City standards due to a lack of focused resources. However, several changes occurred at the end of FY 04-05 to implement improvements: a new vacuum truck was purchased and designated for full-time use for storm drain maintenance, new leadership was established to direct the program, and a team was put in place to meet monthly to help with track progress and make further improvements.

# **Trends and Observations**

- A new NPDES permit is expected to be issued to the City of Carlsbad (as a member Copermittee) by the Regional Water Quality Control Board in the Spring of 2006. More, not less, will be required of the City to maintain compliance in all areas under the permit. The City will need to stress the importance of this permit to all personnel and develop programs to ensure cost effective compliance.
- Mandatory requirements to improve water quality will be issued in the next few years for impaired water bodies within the City of Carlsbad specifically, Aqua Hedionda Lagoon and Buena Vista Lagoon. These requirements will have long-term financial impacts to the City.
- The Regional Board has issued a draft Monitoring Order for Aqua Hedionda Lagoon. When this order is implemented, annual expenses to comply with the order could run as high as \$250,000 (not including special studies) and will need to start being implemented by the Fall 2007. Other stakeholders in the watershed may share costs but this is based on their participation and signing of a Memorandum of Understanding.
- There have been no beach closures in the City of Carlsbad from high bacteria readings in Storm water runoff for the past three years.

#### Public Works

#### SEWER SYSTEM SERVICE DELIVERY

#### THE OUTCOME

Sewer system reliability.

#### THE MEASUREMENT

This measure uses a multi-modal approach combining:

**Volume of Spills:** Volume of reportable sewage spills per mile of sewer mains. For the purposes of this report, a "spill" is defined as any untreated sewage flow that escapes from the City's sewer collection system and has the potential for entering the city's surface water and/or storm drain system.

**Volume of Spills:** Recaptured so that contaminated water does not enter the city's surface water and/or storm drain systems. The volume of spills component looks at spills that were caused by a failure in the city's sewer system. This does not include spills from sewer laterals within the city.

**Station Facility Maintenance:** Percentage of work activities completed during the fiscal year based on standards established in the Maintenance Assessment Program.

**Sewer Main Cleaning:** Percentage of work activities completed during the fiscal year based on standards established in the Maintenance Assessment Program.

#### WHAT THE DATA MEANS

Measures the integrity of the sewer system, the ability of staff to respond quickly and efficiently to spills, and the effectiveness of preventive maintenance operations.

#### **DEPARTMENTS INVOLVED**

Public Works/Maintenance and Operations.

#### **BENCHMARK**

**Volume of Spills:** Annual volume of reported sewage spills due to system failure will be zero. This benchmark is consistent with the requirements of the Regional Water Quality Control Board.

**Volume of Spills Recaptured:** Recapture 100% of all spills from the city maintained sewer system so that sewage never enters the city's surface water and/or storm drain system.

**Station Facility Maintenance:** At least 90% of all pump station electrical moving parts, wet wells, generators, valves and pumps are tested and repaired annually. This program includes station maintenance, electrical maintenance, wet well maintenance, generator maintenance, station surveillance operations, valve maintenance and pump maintenance/repair.

**Sewer Main Cleaning:** At least 90% of all priority sewer main lines will receive high velocity cleaning to ensure proper conveyance of sewage and to prevent sewer system overflows and backups. Priority sewer lines are scheduled for cleaning depending on the location of the lines, flow rates, historical information on the frequency of blockages, and pipe material.

RESULTS Volume of Spills

Fiscal Year	No. of Reportable Spills <sup>1</sup>	Reportable Gallons Spilled	Total Miles of Sewer Mains	Reportable Gallons Spilled per Mile
	Ben	chmark		0
2001	9	1,125	212	5
2002	14	7,835	212	37
2003	7	7,550	232	33
2004	6	209	235	0.89
2005	11	3,030	254	12

<sup>1.</sup> This column includes all spills that were caused by a failure in the city's sewer system (excludes recycled water spills and/or spills from sewer laterals).

**Volume of Spills Recaptured** 

Fiscal Year	Reportable Gallons Spilled <sup>1</sup>	Reportable Gallons Recaptured <sup>2</sup>	Percentage of Gallons Recaptured
	100%		
2001	1,125 <sup>3</sup>	2,640 4	235%
2002	7,835	6,845	87%
2003	7,550	2,200	29%
2004	209	164	76%
2005	3,030	1,025	34%

<sup>1.</sup> This column includes all spills that were caused by a failure in the city's sewer system (excludes recycled water spills and/or spills from sewer laterals). Figures are adjusted from previous years reports.

<sup>2.</sup> Data is based on total reportable gallons recaptured from the City's public sewer system.

<sup>3.</sup> Of note, two significant spills occurred to the recycled water system and are not included above.

<sup>4.</sup> Residual and/ or any other water from other areas during recapture was reported.

# Station Facility Maintenance and Sewer Main Cleaning

	1	% Maintenance Achieved 1.		
Activity		FY 2003	FY 2004	FY 2005
Station Facility Maintenance	Benchmark			
Pump Station Maint.	90%	104%	100%	102%
Pump Station Electrical Maint.	90%	102%	51%	94%
Pump Station Wet Well Maint.	90%	63%	41%	49%
Pump Station Generator Maint.	90%	104%	113%	98%
Pump Valves & Check Valves Maint.	90%	8%	61%	91%
Pump Station Pump Maint.	90%	86%	17%	30%
Overall		77.8%	64%	77%
Sewer Main Cleaning	Benchmark			
Priority Sewer Every 3 Months	90%	Data not available	103%	86%
Priority Sewer Every 6 Months	90%	Data not available	86%	108%
Priority Sewer Every 12 Months	90%	Data not available	93%	80%
VCP Sewer Lines Every 24 Months	90%	Data not available	100%	100%
PVC Sewer Lines Every 36 Months	90%	Data not available	100%	100%
Overall		N/A	96%	95%

<sup>1.</sup> Achievement levels as reported in the "Maintenance Assessment Program" report.

#### **ANALYSIS**

**Volume of Spills:** This component of the sewer system delivery measure includes reportable spills due specifically to system failure. In past reports, the volume measure included only those spills of 50 gallons or more per incident. However, because staff reports all spills regardless of the volume spilled, all spills are now used in this measure. Also, because our benchmark partners do not have responsibility for sewer laterals and in order to maintain comparability of data, this measure does not include spills from sewer laterals even though we report those types of spills when they occur.

The number of gallons spilled per mile of sewer main as a result of system failure was 12. The volume increase over the previous year are due to five additional spills that occurred as a result of blockage in sections of the sewer main system primarily in the older, downtown area. These blockages were caused by grease and/or root intrusion. These sections were inspected and subsequently cleaned as part of our routine sewer main cleaning. Sewer mains in the older areas of the city are categorized as "high priority." These areas are inspected and cleaned every three months as a proactive measure to mitigate the potential of possible blockage and/or spills. If staff identifies areas that

continue to have blockage problems, these areas are included in the high priority maintenance list. The result should be a lowering in potential for sewer spills.

Compared to benchmark agencies, Carlsbad had the lowest reportable gallons spilled due to sewer system failure. It should be noted that we are measuring only sewage spills. Recycled water spill data was included in prior year's reports because the City is required by the Regional Water Quality Control Board to also report recycled water spills. But the focus of this measure is on the integrity of the City's sewage conveyance system so recycled water spills are not included in the measure.

Agency	Reportable Gallons Spilled due to System Failure	Total Miles of Mains	Reportable Gallons Spilled Per Mile from All Sources
City of Carlsbad	3,030	254	12
Leucadia W/W District	4,880	199	25
City of Chula Vista	40,660	400	102

There are too many variables associated with how and when sewer spills occur to make any meaningful comparisons to other agencies. However, staff believes it is important to continue with year-to-year internal comparisons to measure the integrity of the city's sewage conveyance system.

**Volume of Spills Recaptured**: This measure is included to represent the effectiveness of the City's "Sewer Response Plan." The number of gallons recaptured in fiscal year 2005 was 34% of total reportable gallons spilled due to system failure. This did not meet the benchmark of 100%. Staff responds immediately to all spills upon notification; however, in some cases notification to staff did not come in time to allow for the total recapture or containment of spilled sewage. There were two separate incidences in which staff was unable to fully recapture spills. Both were related to areas where new construction was occurring. Staff believes that debris resulting from the construction blocked the 8" collector mains and was the most likely cause of the stoppages. The total uncaptured sewage from these two events alone was 1,500 gallons. This amount represents the majority of the volume of spills that were not captured.

Agency	Reportable Gallons Spilled	Reportable Gallons Recaptured	Percent of Gallons Recaptured
City of Carlsbad	3,030	1,025	34%
City of Chula Vista	40,660	3,390	8%
Leucadia W/W District	4,880	250	5%

As compared to the partner agencies contacted, Carlsbad reported the highest percentage of sewage recaptured. However, inconsistent reporting procedures among other agencies does not allow for establishing any comparability of data for this measure. It is difficult to determine by comparing to other agencies whether or not Carlsbad is operating at a high performance level or if any particular standard is being met. As with the volume of spills measure, staff will continue with year-to-year internal comparisons to measure the effectiveness by which staff administers the City's Sewer Spill Response Plan.

Maintenance Assessment Program: A Public Works Maintenance Assessment Program is used to establish and document the frequency of recommended preventive maintenance and/or responsiveness to repair needs. At the end of each fiscal year, the level of accomplishment is measured by comparing the percent of completed work to planned maintenance. A high maintenance standard can result in increased costs to provide the required preventive maintenance services. Conversely, a decrease in the amount of preventive maintenance may decrease costs in the short-term, but puts the overall system reliability at risk. When benchmarks are met or exceeded, optimal operating efficiency and reliability of the sewer conveyance system are achieved. This results in reduced repairs and sewage spills/blockages, and enhanced protection of the environment. The Public Works Maintenance Management Program and work order systems are used to collect and analyze performance data.

Station Facility Maintenance: The standard for station facility maintenance includes the testing and repair of all pump station electrical moving parts, wet wells, generators, valves and pumps to ensure easy access to station locations and proper pumping (conveyance) of sewage. The benchmark for these activities is 90% of all planned maintenance will be completed during the year. Each component was tested and serviced in accordance with the Maintenance Management Program, with the results shown in the table above. Staff was able to maintain the benchmark standards in the majority of work activities by better coordinating planned with corrective maintenance. One area in particular that was addressed was in generator maintenance. This activity was contracted out via an annual generator maintenance agreement. This allowed staff to redistribute time to other planned maintenance and/or repairs. As the levels of maintenance of activities under Station Facility Maintenance (such as

maintenance of pumps, electrical, etc.) will vary from year to year, staff will make sure that the more critical components receive a proper level of attention.

**Sewer Main Cleaning:** The standard for sewer main cleaning includes the high velocity cleaning of all priority sewer main lines to ensure proper conveyance of sewage and to prevent sanitary sewer overflows, as required by the California Regional Water Quality Control Board. The benchmark for sewer main cleaning is 90% of all planned maintenance will be completed during the year. Overall planned sewer main cleaning was completed 95% of the time. With only small variations in results, fiscal year 2005 was consistent with prior year's results and demonstrates that staff continues to maintain its annual sewer main cleaning as planned.

# ACTION PLAN Volume of Spills

- Staff will continue with preventive maintenance sewer line inspection and monitoring work in a proactive attempt to eliminate the volume of spills.
- Contractors/Developers are required to keep construction debris out of the sewer system. CM&I inspectors are tasked with inspecting the new sewer systems and making sure that they are kept clean of debris. However, debris can inadvertently end up in a sewer system at any time, so occasionally some spills/blockages will occur. Staff will continue with ongoing inspection of new construction to ensure that any debris ending up in the sewer system is held to a minimum and does not result in a spill or blockage.

# Volume of Spills Recaptured

• Staff will continue to investigate and implement mitigation efforts and enhancements to the Sewer Response Plan to increase the percentage of spills recaptured. The measure of recaptured spills will include any sewage spill that occurs, whether or not it's the result of system integrity failure or caused by other occurrences, e.g., line damage due to construction and blockages caused by grease disposal into sewer system

# Station Facility Maintenance

• Staff will look into alternative work methods to improve the balance of planned versus corrective maintenance. This will include, but not be limited to, the use of contract services, temporary help, and/or consolidation of services with other Public Works divisions.

# Sewer Main Cleaning

• Even though sewer main cleaning is meeting the benchmark, staff will look into alternative work methods to improve work productivity in this activity. This will include, but not be limited to, the use of contract services,

- temporary help, and/or consolidation of services with other Public Works divisions.
- In fiscal year 2006, staff will implement a new work management system (Hansen) that will automate scheduling and record maintenance of work activities, and tie maintenance and/or repair work to a specific asset in the sewer system. Priority categories as defined in the Maintenance Assessment Program will be incorporated into the new system to ensure that the levels of maintenance are achieved. Staff will monitor this activity on an ongoing basis and make adjustments as necessary.
- Staff will compare sewer main cleaning procedures and standards with benchmark agencies.
- Staff of the M&O and Storm Water Protection divisions will review the possible development of a FOG monitoring and compliance program for the prevention of fats, oils and grease ("FOG") discharges into the City's sanitary sewer system. The program may also be used to assist commercial FOG generating customers in meeting their wastewater discharge limits.

#### POINT OF CONTACT

Clint Phillips (760) 438-2722, x7110, cphil@ci.carlsbad.ca.us.

#### Public Works

#### SEWER COST EFFICIENCY

#### THE OUTCOME

Sewer operations cost efficiency.

#### THE MEASUREMENT

The total cost of service per million gallons of sewage collected, treated and discharged. This measure is calculated by dividing the total annual O&M expenditures, including payment to the Encina Wastewater Authority (EWA), less depreciation, by the total sewage flow assessed to Carlsbad by the EWA.

#### WHAT THE DATA MEANS

The annual expenditures per million gallons of sewage collected, treated and discharged represent a financially efficient system when the benchmark is achieved. The outcome is to ensure the safe conveyance and treatment of sewage within a prudent level of expenditures.

#### DEPARTMENTS INVOLVED

Public Works/Maintenance and Operations.

#### **BENCHMARK**

Annual cost of service will not exceed \$2,001 per million gallons of sewage. This benchmark was established based on the results of a survey conducted by the American Water Works Association in February 2005. \$2,001 per mg is the median score for all agencies surveyed within the 50,001 to 100,000 customer base category. The 25th percentile score is \$1,258 per mg. The 75th percentile score is \$3,003 per mg. This is the first year that this benchmark has been used and will be updated based on the results of subsequent surveys conducted by AWWA.

#### **RESULTS**

Fiscal Year	O&M Expenses 1.	Annual Flow (MG)	\$/mg	Benchmark <sup>2.</sup>
2001	\$3,490,008	2,373	\$1,471	
2002	\$3,569,236	2,278	\$1,567	
2003	\$3,151,172	2,493	\$1,632	
2004	\$3,946,119	2,789	\$1,415	
2005	\$3,992,462	2,688	\$1,485	\$2,001

<sup>1.</sup> The new benchmark excludes depreciation as part of annual costs. As a result, annual costs from previous years were reduced by the amount budgeted for depreciation in those years.

<sup>2.</sup> Source: AWWA publication titled, "Benchmarking Performance Indicators for Water & Wastewater Utilities: Data and Analyses Report," dated 02/2005. Data population category, 50,001 – 100,000.

#### **ANALYSIS**

This is the first year that staff has used data from a wastewater agency survey conducted by the American Water Works Association. For fiscal year 2005, Carlsbad's cost of service of \$1,485 per million gallons (mg) is below the AWWA survey benchmark of \$2,001/mg. The AWWA survey benchmark is the median score of all results. Carlsbad's cost of service measure ranks slightly above the 25th percentile of all those surveyed. This seems to indicate that Carlsbad's sanitation system is operating efficiently within existing resources. The comparatively low cost may also be indicative of a system that is relatively new and has not yet experienced significant failures or greater than anticipated reactive maintenance work which can increase as a system ages.

A Public Works Service Plan proposal was implemented in fiscal year 2006 that included installation of a bypass at larger pump stations. With the bypass, staff can conduct wet well cleaning during the day. Without a bypass the cleaning is conducted at night during which time there are low flows. The ability to do cleaning during the day enhances work safety and reduces operational costs by reducing overtime pay to employees for after-hours work.

Because the city is in a growth mode, there will continue to be fluctuations on the amount of flow to Encina. Also, in abnormally wet years infiltration due to excessive rainfall may artificially inflate the amount of flow registered to the City of Carlsbad. This could skew the results of the per-mg cost being measured.

Agency	FY 2005 Expenses	Total Annual Flow (MG)	Cost Per MG
Chula Vista	\$7,961,050	6,398	\$1,202
San Diego County City 1.	\$4,705,568	3,762	\$1,250
Leucadia WW District	\$2,324,249	1,667	\$1,394
Carlsbad	\$3,992,462	2,688	\$1,485

<sup>1.</sup> City did not wish to be identified

Costs for maintenance and repair of sewer laterals are included in the City of Carlsbad's expenditures. Because other agencies do not have responsibility for sewer laterals, these costs are not included in their budgets.

#### **ACTION PLAN**

• Staff will continue to use information from the Maintenance Assessment Program to evaluate operational practices within the Sanitation Operations and Construction/Maintenance divisions in an effort to ensure the most cost effective means by which services are rendered.

- The cost of service per million gallons (mg) of sewage flow is one of three measures that the AWWA reports in its survey report. The other two measures are cost of service per account and direct cost of treatment per million gallons. Only one of the three-benchmark standards is being used in this year's report. The other two measures may be used in subsequent reports if staff can determine that this data is meaningful to Carlsbad.
- Staff will continue to conduct research to determine if national benchmark standards are available for use in this measure.

#### POINT OF CONTACT

Clint Phillips (760) 438-2722, x7110, cphil@ci.carlsbad.ca.us.

# SEWER SERVICE CUSTOMER SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction

#### THE MEASUREMENT

City of Carlsbad Public Opinion Survey.

#### WHAT THE DATA MEANS

Highly satisfied customers are an indication that we are providing services in a manner that is desired and/or expected, contributing greater confidence in the Construction Maintenance and Sanitation Operations divisions, and local government in general, resulting in high quality of life for community members.

# **DEPARTMENTS INVOLVED**

Maintenance and Operations/Sanitation Operations, Construction Maintenance and Utility Account Maintenance; Finance/Utility Billing.

#### **BENCHMARK**

90% of customers rate sewer services as "good or excellent."

#### RESULTS

Benchmark	2001	2002	2003	2004	2005
90%	92%	91%	93%	No data	92%

#### **ANALYSIS**

The customer service rating for this measure has consistently met or exceeded the benchmark for a number of years, and there is no anticipated change in the service levels. As a result, it was determined that this question would be asked only in alternating years. 2004 was an "off year," but in 2005 the City's customer service rating in sewer service once again exceeded the benchmark.

Sewer service citywide is provided by three separate agencies; the City of Carlsbad, the Leucadia Wastewater District and the Vallecitos Water District.

The service areas that incorporate City of Carlsbad customers are described as follows:

• <u>City of Carlsbad Service Area (CMWD):</u> The City of Carlsbad sewer service area covers approximately 65% of the city and generally covers the area

north of La Costa Avenue to El Camino Real, east of El Camino Real, and north of Alga Road extending all the way to the northern City border.

- **Leucadia Wastewater District (LWWD):** The LWD service area is contained within the Southeast Quadrant of the City and includes the area south of Alga Road to the southern City border, bordered by El Camino Real to the west, and to the eastern border of the City.
- <u>Vallecitos Water District Service Area (VWD):</u> The VWD service area is contained within the central/eastern portion of the Southeast Quadrant of the City.

In this years report, staff successfully worked with SBRI to develop a service area comparative analysis of customer satisfaction by comparing SBRI's list of respondents from the Southeast Quadrant to lists of Carlsbad customers being served by LWWD and VWD. Staff is now able to differentiate sewer service customer satisfaction results between the City of Carlsbad's service area and those who receive services from other service providers. The survey results revealed that customer service and satisfaction within Carlsbad's service area is still above the benchmark and consistent with citywide results incorporating the other two service providers.

# **ACTION PLAN**

Continue to include sewer services questions in the citywide public opinion survey in alternating years. In addition, the Social and Behavioral Research Institute (SBRI) at Cal State San Marcos, which conducts the survey for the City, has the ability to determine which quadrant of the City a citizen resides.

#### POINT OF CONTACT

Clint Phillips (760) 438-2722 x 7110, cphil@ci.carlsbad.ca.us.

# GROWTH MANAGEMENT/SEWER COLLECTION SYSTEM

#### THE OUTCOME

Adequate sewer capacity for City residents and businesses.

# THE MEASUREMENT

Trunk line capacity will have sufficient conveyance capacity to handle tributary wastewater flows under peak flow conditions.

#### WHAT THE DATA MEANS

The sewer trunk capacity is greater than the flow from each respective sewer basin.

The 2003 City of Carlsbad Sewer Master Plan Update is used to identify the facilities necessary for development occurring within the City's Sewer Service Area. These new facilities are funded with development fees and sewer connection fees. New developments in the City are conditioned to either start their construction after required facilities are operational, or construct the facilities concurrent with their projects.

The Leucadia County Wastewater District (LWD) serves the La Costa area in the southeast part of the City. The City coordinates development with LWD and conditions projects to ensure facilities are in place prior to the completion of the development.

# DEPARTMENT INVOLVED

Engineering, Maintenance & Operations.

# **GROWTH MANAGEMENT STANDARD**

Trunk-line capacity to meet demand, as determined by the appropriate sewer districts, must be provided concurrent with development.

#### RESULTS

Currently in compliance with the Growth Management Standard

#### **ANALYSIS**

The 2003 City of Carlsbad Sewer Master Plan Update evaluated the sewer infrastructure needs of the Carlsbad Sewer District and identified those facilities required to accommodate future customers. Sewer trunk main capacities are estimated by comparing wastewater flow projections to the capacity of the sewer system. Using a sewer model, the existing and future sewer demands are estimated and compared to the capacity. In addition,

annual flow measurement information is also used to determine actual flows in the sewer trunk mains.

The City of Carlsbad is served by four major interceptor systems and are described in more detail as follows:

**Vista/Carlsbad Interceptor:** The Vista/Carlsbad (V/C) Interceptor is jointly owned by the City of Vista and the City of Carlsbad. The V/C Interceptor is approximately eight miles long and extends from College Blvd at Highway 78 to the Encina Water Pollution Control Facility (WPCF). The agreement for Ownership, Operation and Maintenance was revised in February 2002. Carlsbad's ownership rights are based on the full flow pipeline capacity and increases in the direction of flow, reaching approximately 50% ownership in the downstream reaches. Projected flows for Carlsbad are now lower, and the percentage of flow for Carlsbad in this reach is estimated at 37.2%. The 2003 Sewer Master Plan recommends a new agreement be negotiated based on the updated flow projections.

A capacity analysis included in the 2003 Sewer Master Plan Update indicates three relatively flat pipeline portions of Reaches VC13, VC14 & VC15. As a result, during peak period flows, the pipeline is flowing full. The FY 2005/06 Capital Improvement Program has programmed funds for construction of upgrades to these reaches projected to begin in FY 2006/07. The replacement pipelines are sized based on ultimate flows from both the Carlsbad and Vista Sewer Districts.

**Buena Interceptor:** The Buena Interceptor begins at the corner of El Camino Real and Palomar Airport Road and flows through the industrial park parallel with Palomar Airport Road to the Encina WPCF. The City of Carlsbad leases capacity in the Buena Interceptor from the City of Vista. Carlsbad's ownership rights increase in the direction of flow beginning with 17.65 percent as the interceptor enters the city and approaches 35 percent ownership in the downstream reaches.

The 2003 Sewer Master Plan Update provided an analysis of available capacity of this interceptor and concluded Carlsbad will not require additional capacity to convey projected ultimate flows. It is noted the existing Buena Interceptor does not have the capacity to convey build out flows based on ultimate flow projections for the Carlsbad Sewer District, Buena Sanitation District and the City of Vista Raceway Basin. The City of Vista included a project in their 2001 Master Plan to construct a new force main from the Buena and Raceway Lift Station to the Vallecitos Interceptor. The Carlsbad Sewer District is currently working cooperatively with the Buena Sanitation and Vista Sanitation Districts to develop a project, which will ensure adequate sewer capacity to accommodate ultimate flows.

**Vallecitos Interceptor:** The Vallecitos Interceptor begins near the intersection of Camino Vida Roble and El Camino Real and follows Palomar Airport Road to the Encina WPCF. The City of Carlsbad currently leases 5.0 MGD of capacity in the Vallecitos Interceptor. City of Carlsbad ultimate peak flows in this interceptor are projected to be less than 3.5 MGD.

The existing interceptor does not have the capacity to convey build out flows for the Vallecitos Water District (VWD) and future flows from the Buena Sanitation District (BSD) and the City of Vista Raceway Basin. The VWD plans to replace the existing Vallecitos Interceptor with a larger capacity pipeline. Based on the projected ultimate flows, Carlsbad could reduce their leased capacity to approximately 4.0 MGD.

**Occidental Sewer:** The City of Carlsbad, the Encinitas Sanitation District (ESD), and the LWD jointly own the Occidental Sewer Interceptor. This interceptor system enters the city at the intersection of Carlsbad Blvd and La Costa Ave, and runs parallel the SDNR railroad tracks to the Encina WPCF. Carlsbad's current ownership capacity, which is estimated to be approximately 8.5 MGD, is projected to be approximately 4.0 MGD in excess of what is required to convey the ultimate peak wet weather flows.

The LWD projects they will need to acquire an additional 1.6 MGD of conveyance capacity in the Occidental Sewer to accommodate projected future flows. It is recommended the ownership capacities defined in the 1972 Occidental Pipeline Agreement be updated based on current flow projections.

The City of Carlsbad also utilizes three localized sewer interceptor systems as follows:

**North Agua Hedionda Interceptor:** The North Agua Hedionda (NAH) Interceptor transverses along the north shore of the lagoon between El Camino Real and the V/C Interceptor in the SDNR railroad right-of-way. The NAH Interceptor is entirely owned by the City of Carlsbad and conveys only City of Carlsbad wastewater. With the recent construction of the South Agua Hedionda Interceptor Lift Station, flows, which were temporarily directed to the NAH Interceptor, have been removed. Continued flow monitoring of this interceptor system must be performed to determine if and when appropriate capacity upgrades must be constructed.

**South Agua Hedionda Interceptor:** The South Agua Hedionda (SAH) Interceptor will serve areas south and east of the Agua Hedionda Lagoon, and will connect with the V/C Interceptor at the SDNR railroad right-of-way. The South Agua Hedionda Interceptor Lift Station is currently operational and all flows originating east of the lift station are now flowing into the new lift station. The remainder of the interceptor east of El Camino Real will be constructed concurrent with development in the area.

**North Batiquitos Interceptor:** The North Batiquitos (NB) Interceptor collects only City of Carlsbad flows in the upper reaches. The last 2,415 feet into the Encina WPCF (the Occidental Sewer) is jointly owned by the City of Carlsbad, the LWD, and the ESD. The NB Interceptor begins on the north shore of the Batiquitos Lagoon near El Camino Real and flows westerly along the north shore of the lagoon to the SDNR railroad right-of-way. The 2003 Sewer Master Plan Update determined this interceptor system is adequate to accommodate future flows within the tributary basin.

The sewer connection fee has been updated based on updated construction cost with a lower number of equivalent dwelling units projected at build out compared to the previous master plan. The FY 2005/06 Capital Improvement Program included a description of the future sewer line projects and allocated funds for their construction.

#### **ACTION PLAN**

- Vista/Carlsbad Interceptor Reaches 11B 15 (between the Agua Hedionda Lagoon and the Encina Wastewater Treatment Facility) are scheduled in the CIP to be replaced in FY 2006/07.
- North Agua Hedionda Interceptor Scheduled for continued field monitoring to track existing flows.
- South Agua Hedionda Interceptor Condition future land development projects east of El Camino Real to construct the remaining reaches of the South Agua Hedionda Interceptor system concurrent with development.
- Buena Interceptor Continue routine field monitoring to track existing flows and remaining available sewer capacity. Coordinate with the City of Vista to develop a strategy to design and fund a parallel relief sewer.
- Other reaches of concern will continue to be monitored.

# POINT OF CONTACT

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# SOLID WASTE DIVERSION

#### THE OUTCOME

Environmentally sound solid waste services.

#### THE MEASUREMENT

Diversion of solid waste from disposal in compliance with state law (AB 939), as reported annually to the California Integrated Waste Management Board (CIWMB).

# WHAT THE DATA MEANS

Measures the level at which the City of Carlsbad is maintaining environmentally sound solid waste services for its citizens.

The diversion rate is a measurement tool for the California Integrated Waste Management Board (CIWMB) to assess compliance with AB 939. AB 939 requires local agencies to reduce the amount of solid waste disposed in landfills by 50 percent from an approved base year amount. To achieve the AB 939 diversion requirements, jurisdictions are required to promote recycling and maximize the use of feasible source reduction and recycling options. Jurisdictions that fail to meet the diversion rate requirements may be subject to both monetary and non-monetary penalties.

Diversion rate information is reported on the calendar year prior, so the City is finalizing its 2004 diversion rate figure now.

# **DEPARTMENTS INVOLVED**

Public Works Administration & Environmental Programs

# **BENCHMARK**

Achieve an annual diversion rate of 50% or greater to be in compliance with AB 939.

# **RESULTS**

Benchmark	2000	2001	2002	2003	2004
<u>≥</u> 50%	59%	55%	55%	48%*	57%**

 $<sup>^{\</sup>star}$ Because CIWMB approves diversion rates in two-year increments, the 2003 figure has not been approved yet.

 $<sup>^{\</sup>star\star}$  The 2004 diversion rate is calculated using the TSDI data as explained in the Analysis section.

#### **ANALYSIS**

In 2004, the City's diversion rate was 57%, well above the State-mandated minimum level.

Due to the changes in diversion rate calculation methodology, it is difficult to compare the past several years' solid waste diversion rate to prior years. Over the last three years the rate has fluctuated from 55% to 48% and back to 57%. This fluctuation can be explained by examining CIWMB policies for calculating the rate and their attempts to be flexible and responsive to cities' concerns and needs.

Specific changes were made in each of the past two years, which resulted in the rather large disparity. In calculating the results for 2004, the CIWMB allowed cities to choose between two types of economic data. This change led to the significant increase in the 2004 data – but is more in line with historical results.

Comparisons may become even more complicated in 2006 should the Board adopt proposed changes to AB 939 reporting. Proposals exist that would take the onus of diversion from individual municipalities and place that burden on all jurisdictions in a county as a whole.

#### **ACTION PLAN**

Staff will continue to ensure residents enjoy the best service possible while also seeing that Carlsbad meets its state-mandated diversion requirements. To this end, staff is working to implement three new programs that Council approved for implementation in the FY05-06 fiscal year: residential composting, a Household Hazardous Waste (HHW) collection event, and door-to-door HHW collection. Staff will also investigate other program enhancements, for example commercial recycling, that could assist with increased diversion.

# POINT OF CONTACT

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# SOLID WASTE COST

# THE OUTCOME

Solid waste services cost efficiency.

# THE MEASUREMENT

Solid waste service rates adjusted to exclude franchise and other City fees.

# WHAT THE DATA MEANS

Identifies the services offered and measures the cost of providing solid waste services.

# **DEPARTMENTS INVOLVED**

Public Works Administration & Environmental Programs

# **BENCHMARK**

Carlsbad contracted solid waste service rates for residential and commercial customers will rank in the lowest one-third when compared to other cities in San Diego County.

# **RESULTS**

Year	Benchmark	2001	2002	2003	2004	2005*
Residential Ranking	Lowest One- Third	Yes	Yes	Yes	Yes	Yes
Commercial Ranking	Lowest One- Third	Yes	Yes	Yes	Yes	Yes

# **RESIDENTIAL RATES\***

#### **COMMERICAL RATES\***

City	Adjusted Rate What is Paid to the Hauler
Chula Vista	\$13.78
Carlsbad	\$14.07
Escondido	\$14.09
Del Mar	\$15.02
San Marcos	\$15.07
El Cajon	\$15.40
La Mesa	\$15.51
Lemon Grove	\$15.66
Coronado	\$15.94
No. Co. City	\$15.99
Encinitas	\$16.07
Solana Beach	\$16.24
Vista	\$17.09
Oceanside	\$18.53

standard once per week collection service.

City	Adjusted Rate What is Paid to the Hauler			
Carlsbad	\$72.69			
Escondido	\$73.76			
Chula Vista	\$ 74.46			
Coronado	\$75.22			
El Cajon	\$75.85			
Encinitas	\$78.18			
Solana Beach	\$78.82			
Lemon Grove	\$78.83			
Del Mar	\$79.32			
No. Co. City	\$79.92			
San Marcos	\$82.38			
Oceanside	\$82.52			
Vista	\$83.56			
La Mesa	\$85.20			
*Standard 3-yard once per week pick-up servicused for comparison.				

NOTES: Imperial Beach, National City and Santee are not included due to differences in their fee structure. San Diego is not included because service is not provided by contract.

#### **ANALYSIS**

As shown in the tables above, the City's residential and commercial adjusted rates remain among the lowest when compared to the other jurisdictions. For the first time staff is comparing the City of Chula Vista in the rate comparison. Chula Vista is significant because that city benchmarks services against others in the County and their waste hauler agreement mandates that their service be the least expensive in the County. With that said, Carlsbad ranks number 2 on the survey of San Diego County cities for residential rates and number 1 for commercial rates.

For the last five years, the City's solid waste services continue to achieve the cost efficiency benchmark of ranking in the lowest one-third when compared to other San Diego cities. A significant factor in the City's achievement of the solid waste services cost efficiency benchmark had been the stability of its adjusted rates. This year marks the first time in seven years that Carlsbad has increased the cost of solid waste service. The unadjusted rate for residential service rose from \$16.47 to \$17.50 per month; a \$1.03 increase which factors to 6.1%. The cost for commercial service also increased – up 7.2% from \$86.23 to \$92.44. Despite these increases, Carlsbad continued to achieve the cost efficiency benchmark.

In searching for a common denominator to compare cost efficiency, the City selected the adjusted rate because it provides a universal point for cost comparison by removing the individual fees (franchise, storm water, household hazardous waste) imposed by the evaluated jurisdictions. The adjusted rate is what jurisdictions pay to the hauler. The unadjusted rate includes the fees discussed above and is the rate that residents and businesses pay for service.

Each city varies in regards to the solid waste services provided. Many cities in San Diego County offer automated trash and recycling collection as opposed to manual collection. Some cities offer free bulky item collection (bulky items include appliances or furniture that are often too heavy to be collected during weekly service), while other cities offer specific free collection dates for bulky items and otherwise charge per item collected outside those dates.

Carlsbad provides manual trash and recycling collection, access to permanent household hazardous waste facilities, electronic waste collection sites, and various special item collection services. Carlsbad is one of only three cities (others are Oceanside and Coronado) in San Diego County that still have manual residential trash and recycling. Oceanside is the only other city not using single stream recycling – where all recyclable material is commingled in a bin by the resident.

# **ACTION PLAN**

While being in the lowest one-third for residential and commercial rates is attractive, it does not necessarily translate into providing top quality service. Staff will continue to ensure residents enjoy the best service possible while also seeing that Carlsbad meets its state-mandated recycling requirements. To this end, staff is working to implement three new programs that Council approved last year: residential composting, a Household Hazardous Waste (HHW) collection event, and door-to-door HHW collection. Staff will also investigate other program enhancements that could be added to the solid waste program that would increase diversion.

# POINT OF CONTACT

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# SOLID WASTE CUSTOMER SERVICE & SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction.

#### THE MEASUREMENT

Results of annual citywide public opinion survey.

#### WHAT THE DATA MEANS

Best indication as to whether solid waste customers' needs and expectations are being met.

# **DEPARTMENTS INVOLVED**

Public Works Administration

# **BENCHMARK**

90% of customers rate Solid Waste Services as "Good" (3 on a 1-4 scale) or higher in all customer service survey categories.

#### RESULTS

YEAR	Trash Collection	Recycling Collection	Household Hazardous Waste Collection
Benchmark	<u>&gt;</u> 90.0%	<u>&gt;</u> 90.0%	<u>&gt;</u> 90.0%
2003	88.6%	82.7%	69.5%
2004	87.3%	81.5%	68.2%
2005	87.0%	83.0%	66.3%

# **ANALYSIS**

Although customer satisfaction remains under the benchmark for this goal, the results are consistent with previous years – with a slight increase in the satisfaction rate for the recycling program. The number of surveyed customers who rated Carlsbad's trash collection at good to excellent in 2005 was 87% and the recycling program was rated at 83%.

The results of the last several years have been quite stable – differences n the percentages displayed are not statistically significant. Trash collection received the highest ranking for a contracted service.

The survey results also show that 65.5% of Carlsbad residents rate hazardous waste disposal as good to excellent. Although this represents a majority of residents, these numbers also reflect a need for staff to look for improvement in

household hazardous waste (HHW) collection services. Incorporating the door-to-door HHW collection program and the special HHW collection event authorized by Council in the FY 05-06 budget is expected to improve the marks received on HHW collection.

Complaints about the program generally focus on a comparison of services offered by other San Diego County cities – for example automated trash collection and single-stream recycling. When contacted by a resident, staff documents the complaint or service problem using the Request for Action (RFA) system and works promptly to resolve the matter.

#### **ACTION PLAN**

Staff will continue to ensure residents enjoy the best service possible while also seeing that Carlsbad meets its state-mandated recycling requirements. To this end, staff is working to implement three new programs that Council approved last year: residential composting, a Household Hazardous Waste (HHW) collection event, and door-to-door HHW collection. Staff will also investigate other program enhancements that could be added to the solid waste program that would increase diversion.

Staff is working with our Contractor to enhance existing services; an additional bulky item collection day will be added in 2007 – bringing the total to five collection event days; in 2006 residents will be able to dispose of two bulky items per event; and beginning Spring 2006 Carlsbad will have curbside mixed paper recycling.

# POINT OF CONTACT

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# STORM WATER SERVICE DELIVERY

#### THE OUTCOME

Water quality that maintains the beneficial uses of Carlsbad's creeks and lagoons.

#### THE MEASUREMENT

A multi-modal approach combining:

- Water Quality (Bacteria, dissolved oxygen concentration, turbidity)
- Drainage Service Delivery

Water Quality: The City monitors storm water discharges and water quality of various creeks, lagoons and the ocean (receiving waters) in Carlsbad as part of the Coastal Lagoon and Outfall Monitoring program and the annual Dry Weather Program. In addition, the City participates in regional monitoring programs that collect data on local creeks and lagoons. The receiving water results are compared to Water Quality Objectives listed in the State's Basin Plan, which are set by the State to be protective of beneficial uses. Fecal coliform bacteria, dissolved oxygen and transparency or turbidity results will be routinely monitored in Agua Hedionda Lagoon and Creek to help determine if beneficial uses are being met. Results may also show if water quality is improving or declining over time.

**Drainage Service Delivery:** In addition to these sampling events, the Drainage Service Delivery index will provide a statistical comparison of completed maintenance activities versus scheduled maintenance. This will encompass the following three maintenance activities:

- Drainage inlets inspected annually
- High priority inlets cleaned annually
- All other identified basins cleaned annually

# WHAT THE DATA MEANS

**Water Quality:** Beneficial uses are the uses of water necessary for the survival or well being of humans, plants, and wildlife. Examples include recreation, industrial and agricultural water supply and the support of aquatic habitats. Beneficial uses for all surface and ground waters in the San Diego Region are designated by the State in the Basin Plan (Water Quality Control Plan for the San Diego Basin, 1994).

Water quality objectives are defined as "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." If water quality objectives or other conditions are not met, the State may designate a waterbody as being "impaired," indicating that beneficial uses may not be adequately protected, thus requiring additional costly monitoring and pollution control programs.

Agua Hedionda Lagoon is a highly used waterbody that the State has identified as being impaired by sedimentation and bacteria. This lagoon has many designated beneficial uses including recreational, commercial, industrial and habitat for aquatic organisms. This measure is currently focused on Agua Hedionda Lagoon and Agua Hedionda Creek as a pilot program, and may be expanded in the future to other lagoons and creeks in Carlsbad.

This measure determines if the numerical water quality objectives for fecal coliform bacteria, dissolved oxygen and transparency/turbidity are being met in the Lagoon and Creek. Fecal coliform bacteria concentrations are measured as human-health related indicators of sewage pollution. Fecal coliform levels must be met in order to protect recreational beneficial uses. Dissolved oxygen in the water column is critical for respiration of most aquatic organisms. It is one of the most universal indicators of overall water quality. High dissolved oxygen concentrations represent good conditions, while low concentrations can indicate organic pollution. A transparency tube or turbidity measurement can be used to estimate the clarity of surface waters. High transparency is generally indicative of clean water. Low transparency is typically associated with degraded waters, indicating light limiting conditions which in turn, negatively affect plant growth and the aquatic habitat. The turbidity standard applies to the creek and the transparency standard applies to the lagoon. Meeting water quality objectives for dissolved oxygen and transparency/turbidity helps demonstrate protection of aquatic life and habitat, as well as beneficial uses for humans.

**Drainage Service Delivery:** The Drainage Service Delivery index will measure the effectiveness of a portion of the drainage system maintenance program. This program is being revised for FY 2005-06 in order to optimize maintenance activities and to make full use of new vacuum equipment obtained at the beginning of the year. The new program establishes and documents the frequency of recommended preventive maintenance and then measures the level of accomplishment each year by comparing percent of completed work to scheduled maintenance. Data are tracked in the Hansen work order system.

# **DEPARTMENTS INVOLVED**

PW Administration and Environmental Programs General Services/ Storm Drain Maintenance

# BENCHMARK

**Water Quality:** Each sampling measure to achieve a "good" rating 100% of the time. The following table details the sampling benchmarks. Please note that turbidity, or cloudiness, is measured in Nephelometric Turbidity Units (NTU).

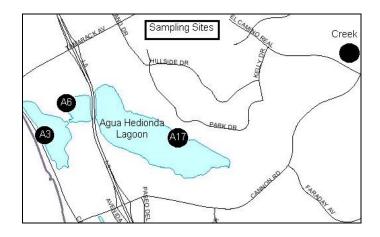
MEASURE	GOOD	FAIR	POOR
Dissolved		< 5.0 less than	< 5.0 more than
Oxygen	≥ 5.0 ppm	half the time	half the time
		> 400/100 ml less	> 400/100 ml more
Fecal Coliform	≤ 400/100 ml	than half the time	than half the time
Transparency	≥ 50% of depth	< 50% of depth less	< 50% of depth
		than half the time	more than half the
			time
Turbidity	≤ 20 NTU	> 20 NTU less than	> 20 NTU more
(Creek)		half the time	than half the time

**Drainage Service Delivery:** 90% completion of all scheduled maintenance activities.

# RESULTS

**Water Quality:** Results from the 12 monthly sampling events during the sampling year are shown below.

Site	Dissolved Oxygen	Fecal Coliform	Turbidity
A3	Good	Fair	Good
A6	Fair	Fair	Good
A17	Fair	Fair	Fair
Creek	Good	Fair	Fair



**Drainage Service Delivery:** Last year's measure and results are as follows:

Fiscal Year	Benchmark	% Of High Priority Inlets Cleaned	% Of Inlets Inspected	% Of All Other Basins Cleaned
2005	90%	34%	15%	75%

# **ANALYSIS**

**Water Quality:** The water quality results shown above represent monthly sampling from October 2004 through September 2005. Samples from the lagoon sites rated good or fair for all three measures. The creek site also rated fair for fecal coliform, but it exceeded the benchmark 6 out of 12 monthly samples. The Storm Water Protection Program has continued to address potential urban sources of fecal bacteria (pet waste, sewage leaks, septic systems, horse stables, etc.) through inspections, enforcement and education, but no single source has yet been identified.

An issue to consider in source identification and assessment is that the Fecal Coliform group also contains bacteria with species that are not necessarily fecal in origin. To help determine if the source is human or warm-blooded animals, it may be best to begin testing for additional bacterial indicators. These can include Fecal streptococci and/or E. Coli, which may be more specific to fecal material from humans and other warm-blooded animals. Other states have changed to some of these indicators, but California still uses Total Coliform, Fecal Coliform and Enterococcus in most water bodies.

At the end of FY 2004-05, the City purchased a continuous water quality-monitoring device to be installed at the creek site. This probe is capable of continuously measuring dissolved oxygen, turbidity, pH, nitrate, ammonium, temperature, chlorophyll and specific conductance and will be tied into continuous flow monitoring equipment. This will be useful for further assessing water quality of the creek and inputs to the lagoon.

**Drainage Service Delivery:** Previously, storm drain maintenance personnel did not have dedicated storm drain cleaning equipment, which limited the amount of maintenance that could occur. At the beginning of FY 05-06, a new dedicated vacuum truck was put into full-time use for storm drain maintenance. The program is now being modified to optimize inspection and cleaning of over 4500 catch basins and inlets. This includes the use of criteria to determine high priority basins/inlets that will be cleaned every 6 months.

ACTION PLAN Water Quality:

- Evaluate results from the continuous water quality-monitoring probe installed at the creek site.
- Conduct a pilot sampling project to analyze creek samples for other bacterial indicators (fecal streptococci, E. coli, or enterococci) that may be more specific to human or warm-blooded animal fecal sources.

# Drainage Service Delivery:

- Continue to refine the maintenance program to optimize pollutant removal.
- Revise the measure for FY 05-06 as follows:
  - Percentage of high priority catch basins/inlets cleaned
  - Percentage of non-high priority catch basins/inlets inspected
  - Percentage of poor rated non-high priority catch basins/inlets cleaned.

# POINT OF CONTACT

Elaine Lukey, Senior Environmental Specialist (760) 602-7582, eluke@ci.carlsbad.ca.us

# STORM WATER PROTECTION COST

#### THE OUTCOME

Storm Water Protection Program cost efficiency.

#### THE MEASUREMENT

A multi-method approach combining:

- Cost per business inspected
- Cost per outfall monitored
- Outreach and education cost per capita
- Maintenance cost per catch basin cleaned

Staff time spent on inspection, monitoring and outreach activities is tracked in a time sheet database. The total numbers of facilities inspected and outfalls monitored are maintained in separate spreadsheets. Cost per business inspected is the time spent on this activity multiplied by the employee hourly rate (includes benefits) divided by the number of businesses inspected. Monitoring costs is the time spent on this activity multiplied by the employee hourly rate plus the laboratory costs for analyses divided by the total number of visits to outfalls for monitoring. Outreach and education cost is employee time spent on this activity multiplied by the employee hourly rate plus printing costs and promotional materials divided by population. Storm water conveyance system maintenance activities and costs are electronically tracked in the Hansen work order program. Cost per catch basin cleaned is calculated by dividing the total cost for these activities by the number of catch basins cleaned.

# WHAT THE DATA MEAN

The City of Carlsbad is one of 20 jurisdictions in San Diego County covered under the State issued NPDES (National Pollutant Discharge Elimination System) permit. The NPDES permit required each jurisdiction to implement an Urban Runoff Management Plan, which details how permit requirements will be implemented and annually assessed. As this is still a new and evolving program, implementation methods vary from one jurisdiction to the next. Coastal jurisdictions have more monitoring requirements than inland jurisdictions. In addition, jurisdictions vary greatly in total land area, population and number of businesses, which prevents meaningful comparisons of overall program costs. This measure breaks out some of the main required program activities in order to provide unit costs for a more meaningful comparison with other jurisdictions or contractors. Results may be used to determine how specific program activities may be streamlined to improve cost efficiency, with consideration still being given to quality and customer service.

Storm Water Protection Program staff annually inspect hundreds of commercial and industrial facilities in Carlsbad that fall under the storm water regulations. Staff develops and distributes educational information and participates in outreach events. Storm Water Protection Program staff also monitor-designated outfalls to the lagoons and ocean bi-weekly or monthly as required. General Services/Storm Drain Maintenance conducts maintenance activities on the storm water conveyance system, except for street sweeping which is a contracted service.

#### **DEPARTMENTS INVOLVED**

Public Works Administration and Environmental Programs Public Works General Services/Storm Drain Maintenance

#### **BENCHMARK**

Benchmarks will be determined after additional data are collected.

#### RESULTS

Fiscal Year	Benchmark	Cost per business inspected	*Cost per outfall monitored	Outreach cost per capita	Cost per catch basin
2003-04		\$96.37	\$75.74	\$0.24	\$42.10
2004-05	TBD	\$42.15	\$52.53	\$0.20	\$60.76

<sup>\*</sup> This measure was modified so that the per outfall costs are based on every visit to the outfall. For 04-05, there were 341 outfalls visited.

## **ANALYSIS**

Benchmark partner relationships were established with the Cities of Encinitas and Oceanside.

Agency	Cost per business inspected	Cost per outfall monitored	Outreach cost per capita	Cost per catch basin
Encinitas	\$212.50	\$68.80	\$0.315	\$106.00
Oceanside	\$187.60	\$38.69	\$0.390	\$ 67.80

The cost per business inspected for Carlsbad includes all office and field time and represents inspections of 250 commercial facilities and 289 industrial sites. Carlsbad costs per inspection decreased significantly over the previous year, possibly due to streamlined field inspection reports that were used and having some commercial inspections conducted by student interns.

Under the Coastal outfall monitoring program, the City made 341 monitoring visits to outfalls and collected 171 samples. Carlsbad uses two people for sampling in order to help coordinate the sampling and data collection, as well

as for the safety factor due to the remote locations of many of the sampling sites. This includes one student intern when schedules allow. Costs were also less than the previous year, as Carlsbad was able to decrease visits to sites that are routinely dry (432 visits in 2003-04 vs. 341 in 2004-05).

The education and outreach costs vary between all jurisdictions. Carlsbad's costs continue to be lower than both previous years costs for the city, and other jurisdictions' costs. Carlsbad has done significant Environmental Programs outreach in the newspaper and other publications, and these have often been paid for through Used Oil Block Grant Funds. These funds are not included in the per capita costs.

The maintenance cost covers the cost per catch basin cleaned. During FY 2004-05, 377 catch basins were cleaned at a cost of \$60.76 per basin. Oceanside uses a contractor to perform annual inspection and cleaning of catch basins at a cost of \$67.80 per catch basin.

#### **ACTION PLAN**

- Collect data, evaluate maintenance cost comparisons, and develop benchmarks for all activities.
- Work with other committees to help standardize the Fiscal Analysis section of the Jurisdictional Urban Runoff Management Program annual report.

# POINT OF CONTACT

Elaine Lukey, Senior Environmental Specialist (760) 602-7582, eluke@ci.carlsbad.ca.us

# STORM WATER PROTECTION CUSTOMER SERVICE AND SATISFACTION

# THE OUTCOME

A high level of customer service and satisfaction.

#### THE MEASUREMENT

A multi-method approach combining:

- Complaint response statistics
- Survey results

The SuiteResponse Request for Action (RFA) system is used by the Storm Water Protection Program to document reports of illegal washing or dumping incidents into the City's storm drain system. When a caller reports a potential discharge or dumping violation that is in progress, the person taking the report creates an issue in the RFA system with a high priority code. Storm Water Protection Program personnel are notified and respond to the site. This measure focuses on the response time, which is the time from the creation of the RFA issue to the time of the first action step, which is staff dispatch to the site. This time will be tracked in the RFA system.

The *survey* measure is the results to the question in the citywide public opinion survey that asks, "Have you seen or heard anything during the past year about how residents can prevent the pollution of our creeks, lagoons or ocean?" If yes, the citizen is asked where they heard or saw this information.

# WHAT THE DATA MEANS

The complaints portion of the measure indicates how well customer expectations are being met. The Storm Water Protection Program has a Hotline number (602-2799) and investigates all types of reports of illegal discharges to the City's storm drain system, which discharges directly to our creeks, lagoons and ocean. A person calling to report an illegal discharge that is happening now expects an immediate response. In addition to meeting customer needs, an immediate response also minimizes the potential for the harmful discharge to enter our waterways. Being able to catch someone in the act also provides a better opportunity for education or enforcement to prevent repeat occurrences.

The survey question can be used to determine if the storm water protection program message is reaching the public. Current outreach materials include the hotline number that the public can call for more information or to report illegal discharges. Results from the survey question can be used to more effectively direct education and outreach methods and efforts in order to provide customer service through requests for action or information.

# **DEPARTMENTS INVOLVED**

Public Works Administration and Environmental Programs

# **BENCHMARK**

- **Complaint Response:** 90% of reports of washing or dumping incidents happening at the time of the report are dispatched within 30 minutes.
- **Survey Results:** 75% of the public report having heard or seen messages regarding ways to prevent water pollution.

#### RESULTS

Following are results from Fiscal Year 04-05 and from the Public Opinion Survey.

# Complaint response:

% of high priority incidents dispatched within 30 minutes:

Year	Benchmark	%
2004	90	90.5
2005	90	91

# Survey results:

% of survey respondents reporting that they had heard or seen messages regarding ways to prevent water pollution:

Year	Benchmark	%
2003	75	58
2004	75	61
2005*	75	42

<sup>\*</sup>The question was modified (see below).

# **ANALYSIS**

# Complaint Response

During FY 04-05, there were 12 reports of washing or dumping to the storm drain system that met the high priority criteria, down from 42 during the previous year. Inspectors were dispatched to all but 1 of these incidents within 30-minutes, thus achieving the benchmark of 90%. This is a big drop in the number of in-progress calls from the previous year, which may signal that the public is becoming more aware of these types of illegal discharges and the City's response to these calls, resulting in fewer incidents.

# Survey Results

For the 2005 survey, the question was changed to "Have you seen or heard anything during the past year about the City's Environmental Programs?" The results were significantly lower than previous years, possibly since this

question is specific to Carlsbad information whereas the previous question was not specific to only Carlsbad information.

In addition, people may not yet be making the link between the storm water program, water conservation, and solid waste program with Environmental Programs.

#### **ACTION PLAN**

- Continue to develop and implement regular education and outreach programs, emphasizing the City's Environmental Programs as well as the linkage between storm water, water conservation and solid waste as Environmental Programs.
- Continue to implement and assess the RFA and complaint response procedures.

# POINT OF CONTACT

Elaine Lukey, Senior Environmental Specialist (760) 602-7582, eluke@ci.carlsbad.ca.us

# GROWTH MANAGEMENT DRAINAGE

## THE OUTCOME

Adequate drainage facilities for protection against flooding and flood damage.

#### THE MEASUREMENT

Drainage facilities are adequate for runoff as determined by the Master Drainage and Storm Water Quality Management Plan.

# WHAT THE DATA MEANS

The Master Drainage and Storm Water Quality Management Plan is used to identify the facilities necessary for development in the City. These facilities include both new drainage improvements and upgrades to existing storm drain facilities. The facilities are funded with developer fees and Planned Local Drainage Area (PLDA) fees. New development areas are typically conditioned to construct the facilities concurrently with the projects.

#### DEPARTMENTS INVOLVED

Engineering, Maintenance & Operations

# **GROWTH MANAGEMENT STANDARD**

Drainage Facilities must be provided as required by the City concurrent with development. During the review of both public and private development projects, the Engineering Department Design Standards are used to determine the appropriate drainage facilities based on the following criteria:

For areas one square mile in size and larger, all drainage facilities shall be sized for the 100-year storm.

For areas less than one square mile in size the drainage facilities shall be sized to accommodate the following:

YEAR FREQUENCY STORM	REQUIREMENT
100	Runoff shall not damage adjacent existing or potential building and structure sites.
50	Runoff shall not overflow outside of property lines on private property or right-of-way in public streets
10	Minimum storm drain and inlet size to accommodate flow

#### RESULTS

All areas of the City meet current Growth Management Standards with the exception of the following:

• The Rancho Carlsbad Mobile Home Park is located where the Calavera Creek flows into the Agua Hedionda Creek and has experienced flooding during heavy rains.

In addition, new NPDES Permit requirements may require modifications to the City's existing drainage systems and additional drainage facilities. An assessment of these modifications and additions is on going and includes such items as dredging desiltation basins and the possible installation of new test stations.

#### ANALYSIS

The 1994 Master Drainage and Storm Water Quality Management Plan identifies facilities necessary for City build-out conditions. Fiscal analyses indicate current Planned Local Drainage Area (PLDA) fees are adequate for the facilities identified in the 1994 Master Plan. The Master Drainage Plan is currently being updated based on several changes in the City's growth patterns due to the Habitat Management Plan and the Habitat Conservation Plan that impact growth projections and densities in various areas of the City. These changes not only impact expected run-off, but also expected PLDA revenues.

Drainage facilities required to meet NPDES standards require funding. A separate fee structure was developed for the maintenance of NPDES facilities and was approved by Council in 2004.

Analysis of the Calavera Creek Channel was completed by the Engineering Department. Facilities to help control flooding are identified in the Drainage Master Plan and Storm Water Quality Management Plan as Detention Basins BJ and BJB. Recommendations for additional facilities to reduce potential flooding includes the following:

- Construction of Basin BJB at the northeast corner of College Blvd and Cannon Road. (Complete)
- Construction of Basin BJ with the extension of College Boulevard east of El Camino Real. (Under review)
- Construct two additional detention basins in the Faraday Avenue and Melrose Drive extension project area. (Under construction)
- Dredging and improvement of Agua Hedionda and Calavera Channels within and downstream of Rancho Carlsbad. (Under design)
- Construction of a parallel 84" storm drainpipe for Calavera Creek in the Robertson Ranch area. (Under design and environmental review)

# **ACTION PLAN**

An update to the Master Drainage and Storm Water Quality Management Plan, including a program Environmental Impact Report, is on-going and scheduled to be complete by the end of FY 05/06.

The following action steps will lead to improvements in the flooding condition at the Rancho Carlsbad Mobile Home Park.

- Complete construction of the basins near Melrose Drive and Faraday Avenue.
- Complete the preliminary design and initiate environmental review for the Agua Hedionda and Calavera channel dredging, and implement project.
- Construction of the Calavera Creek 84" storm drain pipe concurrent with the development of the Robertson Ranch area.

# POINT OF CONTACT

Steven Jantz, (760) 602-2738, Sjant@ci.carlsbad.ca.us.

# GROWTH MANAGEMENT/WASTEWATER TREATMENT FACILITIES

#### THE OUTCOME

Adequate sewer treatment plant capacity for projected build-out of the City.

#### THE MEASUREMENT

The City currently owns 9.24 MGD (million gallons per day) of sewer treatment capacity at the Encina Water Pollution Control Facility (EWPCF). Current flows are monitored by the EWPCF and reported to the city on a monthly basis. Staff evaluates the average annual flow rate and probable land use projections in an effort to anticipate future flows to ensure continued compliance with the Growth Management Standard. This analysis is also used during the development of the annual Capital Improvement Program to project the construction timing and funding allocations for needed sewer treatment plant upgrades.

# WHAT THE DATA MEANS

The City is one of six member agencies that own and operate the EWPCF where the City's wastewater is collected and treated. The current treatment capacity at the EWPCF is 36 MGD with the city owning 25.7% of treatment plant capacity (9.24 MGD).

# **DEPARTMENTS INVOLVED**

Engineering, Maintenance & Operations.

# **GROWTH MANAGEMENT STANDARD**

Sewer treatment plant capacity is adequate for at least a five-year period.

#### RESULTS

The City's average sewage flow to EWPCF for the period from July 2004 through June 2005 was 7.36 MGD. This represents 79% of the City's 9.24 MGD capacity rights.

# **ANALYSIS**

The 2003 City of Carlsbad Sewer Master Plan Update indicates the City's projected build-out flow is approximately 9.87 MGD. The master plan conducted an analysis of annual future sewer flow based on General Plan land use projections. The comparison of annual projected flows and existing sewer plant treatment rights indicates a need to secure additional treatment capacity by the year 2015 in order to accommodate anticipated sewer flows within the Carlsbad Sewer District. Therefore, based on the performance standard, adequate treatment capacity is available at the EWPCF through the year 2010.

Encina Wastewater Authority is currently advertising for the construction of the Phase V expansion of the treatment facility, which will provide build-out treatment capacity for the Encina basin. The City has requested capacity rights to 10.26 MGD in the expansion project. The request for capacity at the EWPCF is based on sewer projections identified in the 2003 Sewer Master Plan Update.

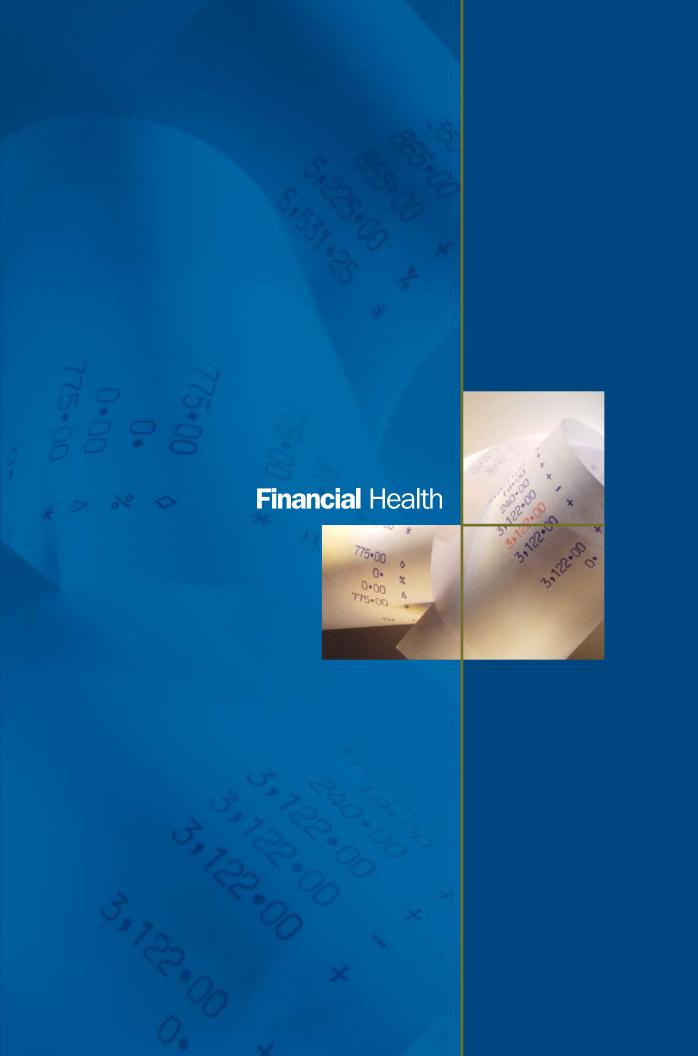
With the completion of the Encina Phase V expansion, the additional sewer treatment capacity will ensure compliance with the Growth Management Standard through build-out of the Carlsbad sewer service area.

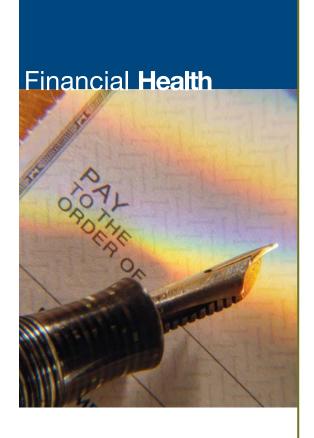
#### **ACTION PLAN**

- Monitor existing flows.
- Work with EWA to construct the Phase V expansion to meet build-out flow capacity requirements.

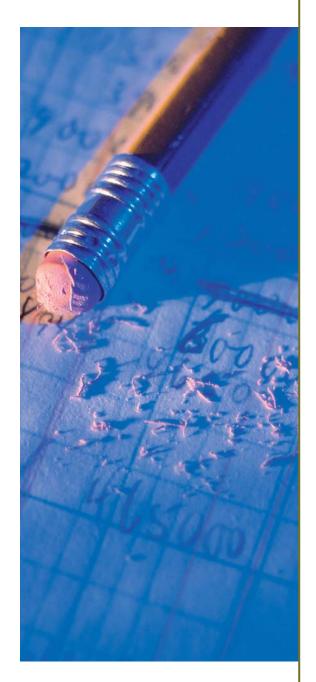
# POINT OF CONTACT

Steven Jantz (760) 602-2738, sjant@ci.carlsbad.ca.us.





Pursue and implement proactive strategies that support sustainable economic health and manage fiscal resources effectively



# **Financial Performance Indicators**

- Business Licensing
- Financial Report Distribution
- Long Term Fiscal Condition
- Outgoing Payment Processing
- Finance Call Center Response Rate Effectiveness
- Risk Management Claims Administration
- Risk Management General Liability Expenditures

# **Management Goals**

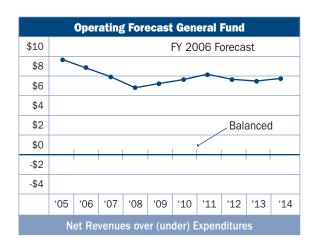
- Cash Handling/Refunds Process Improvement
- Tax Administration
- Business Improvement District
- Property Damage/Loss Claim Guidelines
- Records Retention Goal
- City Fiscal Policies
- Implement new GASBs 44 & 45
- Fixed Asset Management
- CIP Development Process
- Franchise Fee Audit

# Why is it important to Carlsbad?

Financial health is the cornerstone of any viable organization, be it public or private. The City of Carlsbad has strong core values around fiscal conservatism, and the municipal corporation has devoted considerable effort to preserving its fiscal integrity for the foreseeable future.

The concept of financial health is most clearly illustrated by showing the net effect of the cost of services provided to the community and the revenues available to fund those services over a long period of time. By using a 10 year horizon the City's fiscal forecast provides a snapshot of the relationship between the cost of services and revenues over a period long enough to allow the City Council and public to identify trends, and to take action, if necessary, to avoid fiscal problems in the foreseeable future.

The City's ability to deliver top quality services over the long term depends on its success in balancing expenditures and revenues, effectively committing funds to programs that enhance the community's quality of life, insulating the City's revenue base from economic cycles, and the willingness to adjust the fiscal course before problems are encountered.



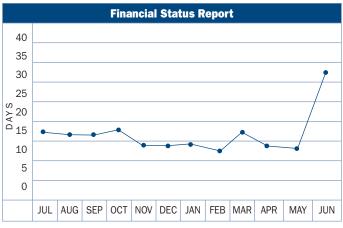


Pursue and implement proactive strategies that support sustainable economic health and manage fiscal resources effectively

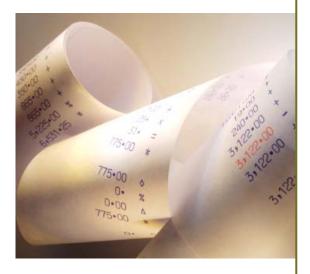
# **Current Results**

Carlsbad's long-term financial health could best be described as "guardedly healthy". The long term forecast projects a slight surplus (approximately 5% of the General Fund) over the next 10 years.

Based upon the results of the performance measures, the Finance Department continues to meet its objectives. The Finance department's ability to provide accurate and timely financial information is critical to the ongoing success of the municipal corporation, and they have improved in this area more than 13% over the past 5 years.



BUSINESS DAYS TO ISSUE



One area of concern is the trend in general liability expenditures. Although per capita liability expenditures went down this year (\$16.17 to \$12.30), it is still in excess of the national benchmark, and reflects the negative impact that a relatively few number of cases can have on Carlsbad's risk exposure.

# **Trends and Observations**

The current forecast shows the City's General Fund Budget being balanced at least until 2012. However, this balance is dependant on a variety of factors, and could be adversely impacted if any of these are realized.

# Potential factors are

- Unanticipated changes in the upcoming operational budgets,
- Increasing capital costs which have the potential to strain the general fund,
- National, state and local expenditure trends which effect our revenue,
- Changes in the types and levels of service the City provides,

Carlsbad's economic health is partially due to its diversified general fund revenue base. This diversity helps to soften the effect of economic downturns, and allows the fund to grow at a stable rate during good economic periods. The major revenue sources in the general fund are:

- Property tax (30%)
- Sales tax (27%)
- Transient occupancy tax (TOT) (10%)
- Development revenue (5%)
- Franchise Tax (5%)

Carlsbad's financial future includes a projected decline in development related revenues as the City approaches buildout. This reduction is offset by the expected increases in property tax, sales tax, and TOT resulting from the development of residential, commercial and office property during the forecast period.

# Administrative Services

# **BUSINESS LICENSING**

#### THE OUTCOME

Efficient, timely and accurate management of the City's Business License system and functions.

# THE MEASUREMENT

- Percentage of license applications and renewals in a pending status
- Percentage of delinquent renewals
- Percentage of business license applications and renewals processed on-line via the City website

#### WHAT THE DATA MEANS

Pending Status: Without key critical information a business license cannot be processed, and is given a pending status. This status is generated under the following circumstances:

- Payment deficiency: Fee is calculated or paid incorrectly
- Critical information missing: Incomplete application or renewal forms
- Missing verification: If required, verification is not received

A reduction in the percentage of businesses in the pending status should result in a more efficient and effective system, ensuring that all businesses are treated in a fair and equitable manner. In addition, it will positively impact the business owner's satisfaction in dealing with the City.

**Delinquent Renewals**: Without the proper monitoring and follow up delinquent renewals can become burdensome, creating additional costs. A reduction in the percentage of delinquent renewals should result in a more efficient and effective system, allowing for businesses to be treated consistently. A decrease in the amount of late penalties created by delinquent renewals, should reflect itself as a positive impact for business owners.

**On-line Applications and Renewals:** The City can benefit from an increase in the number of licenses processed on-line. Without creating a manual burden on staff, the web-based system ensures that applications and renewals are processed in both a timely and effective manner. Another advantage of the on-line system is the reduction of the number of pending and delinquent applications and renewals.

# **DEPARTMENTS INVOLVED**

Finance.

#### **BENCHMARK**

**Pending and Delinquent:** A reduction from year to year (fiscal) in the percentage of pending and delinquent licenses and renewals.

**On-line Applications and Renewals:** An increase from year to year (fiscal) in the percentage of on-line business license processing.

#### RESULTS

	FY 200	3 - 2004	FY 2004 - 2005		
	#/month	Percentage	#/month	Percentage	
Pending Licenses	192	2.23%	181	2.12%	
Delinquent Renewals	113	1.31%	172	2.02%	
On-Line Processing	499	5.78%	449	5.28%	
Total Licenses	8,634		8,	507	

Our goal is for the Finance Department to monitor the businesses operating in the City of Carlsbad, to ensure that they are paying the appropriate business license tax in a timely manner.

#### **ANALYSIS**

During fiscal year 2003-04, the City hired a company to assist in identifying unlicensed businesses. This resulted in an increase in licenses processed. With the audit complete, the number of licenses processed in fiscal year 2004-05 decreased slightly. Pending licenses decreased .11%. We have become more diligent in monitoring our delinquent accounts, and turning the businesses over to Code Enforcement.

On-line renewals decreased by 50 applications or 0.5%.

#### **ACTION PLAN**

We instituted a Finance Call Center in June 2005. This increased the number of people available to answer business license calls. In addition, we will continue to work diligently, following up with companies that have not complied with our verification process and delinquent companies.

The Finance website is currently under review. We are looking closely at the business license section for possible enhancements to increase on- line processing.

#### POINT OF CONTACT

Colette Wengenroth, Finance Mgr. (760) 602-2430, cweng@ci.carlsbad.ca.us.

# Finance Department

#### FINANCE REPORT DISTRIBUTION

#### THE OUTCOME

Timely dissemination of financial information for decision-making.

#### THE MEASUREMENT

Measures how soon after the end of each month financial data is available to the users of the data (in business days).

#### WHAT THE DATA MEANS

Managers and the City Council depend on accurate, timely financial data in order to evaluate the progress of City programs and the ability of the City to continue to fund the programs. The older the financial information, the less valuable it is. This data is compiled based upon the City's fiscal year.

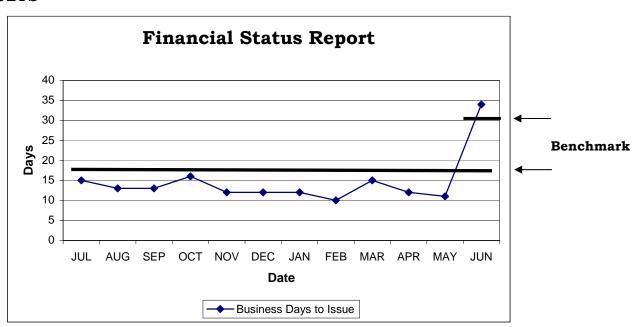
#### DEPARTMENTS INVOLVED

Finance.

#### **BENCHMARK**

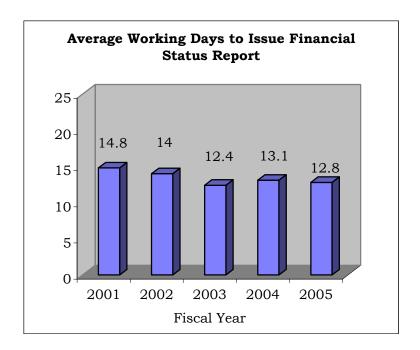
The monthly financial status report is to be issued by the fifteenth business day after the end of the month except for June, which is thirty business days. This is due to the year-end close procedures, which hold the accounts payable process open for most of the month of July in order to ensure an accurate balance for fiscal year-end reporting.

#### **RESULTS**



#### **ANALYSIS**

The benchmark was met in every month except two during the year. The October report was issued a day past the target date. During that time, the department was finishing up the annual Comprehensive Annual Financial Report (CAFR) and related reports. However, in the previous fiscal year, the benchmark was met in every month except for three, an improvement by one month. As in prior years, the June report was issued several days after our target date of 30 business days. The month of June continues to be a month where we will focus additional attention in order to improve our performance. Finance staff is very conscientious of the monthly closing of the books, and the due date for issuing the Financial Status Report. Year-to-date activity is posted in the department so that staff can evaluate how well we are doing in achieving our goal.



#### **ACTION PLAN**

We will continue to work toward issuing the reports earlier than the monthly target date. For the year-end report, we will target the issuance for thirty days after year-end with the understanding that if any significant adjustments that may occur, will delay the report issuance.

#### POINT OF CONTACT

Kevin Branca, Assistant Finance Director, (760) 602-2430, kbran@ci.carlsbad.ca.us.

#### Administrative Services

#### LONG-TERM FISCAL CONDITION

#### THE OUTCOME

Long-term financial health of the City's General Fund

#### THE MEASURE

Projected expenditures versus projected revenues for a ten (10) year timeframe.

#### WHAT THE DATA MEANS

The 10-year forecast provides the City with an early warning system that detects fiscal problems before they occur, which provides the City an opportunity to change its financial structure well before fiscal problems become unmanageable. As long as the revenue line is equal to or higher than the expenditure line, the City's fiscal structure is considered healthy. If the lines cross (revenue falls below expenditure), a financial problem is indicated. The number of years between today and the crossing of the lines gives an indication of the immediacy of the problem, and the magnitude of the correction can be determined by the distance between the expenditure and revenue lines.

#### **DEPARTMENTS INVOLVED**

**Operating Forecast** 

Citywide.

#### **BENCHMARK**

A 10-year financial forecast for the General Fund that shows that revenues will be equal to or exceed expenditures in each year.

#### RESULTS

General Fund Forecast Net Revenue over (under) Expenditures

# General Fund \$10 \$8 \$6 \$4 \$2 \$0 -\$2 -\$4 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14

Net Revenues over (under) Expenditures

#### **ANALYSIS**

Based on estimates developed during the 2005-06 budget process, revenues exceed expenditures, and the budget is essentially balanced through fiscal year 2014. Projections do not go beyond this point, however the trend reflected in the above chart would indicate that, with continued conservative financial management, the City should be in a good financial position into the foreseeable future.

Based on the defined benchmark for this measure, the City's general fund appears to be entering a period of good financial health. Forecasts prepared during 2003 and 2004 suggested that the City needed to take action to avoid a budget imbalance in the mid-term. Corrective fiscal actions were taken during the 2004-05 budget process with significant success. The City implemented a more rigorous budget review process, as well as a number of revenue enhancement and expenditure control measures during the past fiscal year resulting in the balanced projection shown above.

There is continued uncertainty over how the State of California will resolve its long-term fiscal issues. According to the State Legislative Analyst's Office (LAO), the state is facing a structural budget imbalance of \$9 billion per year in the years beyond 2006. Although, the passage of Proposition 1A guaranteed certain revenues to local government, and Proposition A, renewing the TransNet program, have had a positive effect on Carlsbad's financial future, there is still concern about the ongoing fiscal crisis at the state level and how the future deficits will affect Carlsbad.

The 10-year forecast summarized in this measure takes into consideration the City's current operating plan including the construction of new facilities, labor contracts, development projections, staffing projections, adjustments in revenues and service level changes. Based on these inputs, the forecast is for continued budget surpluses through 2014.

Staff has proposed the following system to assist in evaluating the level of financial concern, and the extent of corrective action required Based on this standard, the City's financial health falls into the first category for the foreseeable future.

#### Current Financial Status

#### Recommended Corrective Action

Revenues exceed	Benchmark achieved. The City's long-term			
expenditures over the life of	financial health appears to be good into the			
the forecast.	foreseeable future.			
Expenditures begin to exceed	Although the current financial health appears			
revenues in the 6 to 10 year	to be good, some structural fiscal problems			
range.	may exist. Corrective action will be necessary			
	in the next few budget years.			
Expenditures begin to exceed	Short-term financial health may be			
revenues in the 3 to 6 year	acceptable, but significant concern exists			
range.	regarding long-term health. Corrective action			
	is called for in the next budget year.			
Expenditures begin to exceed	Significant financial problems exist that			
revenues in the 1 to 2 year	require immediate attention.			
range.				

The above chart is designed to identify the current financial state and to provide a recommended course of action.

During the 2004-05 budget cycle, each department prepared a detailed forecast of its budget needs for the next five years. These forecasts took into consideration a number of scenarios including operations under normal fiscal conditions, and operation using a minimum of financial resources. These forecasts were very useful during the preparation of the 2005-06 budget, and provided a strong basis for creating the operating plan for the current year. Departments were encouraged to look at service levels, alternate ways of delivering services, and cost containment actions. In addition, staff initiated an effort to identify both new sources of revenue and ways to enhance existing revenue sources for the General Fund. The results of this work were successfully incorporated into the 2005-06 operating budget.

#### **ACTION PLAN**

Continued effort to control the growth of expenditures, and to enhance revenues is needed, however the immediate concerns raised in last years report have been addressed.

#### POINT OF CONTACT

Jim Elliott (760) 602-2409, Jelli@ci.carlsbad.ca.us.

# Finance Department-

#### **OUTGOING PAYMENT PROCESSING**

#### THE OUTCOME

Facilitate timely and accurate payments to vendors and employees while ensuring compliance with City policies and procedures.

#### THE MEASUREMENT

- Percentage of payments made successfully
- Percentage of payments made electronically.

#### WHAT THE DATA MEANS

#### Successful Payments

Unsuccessful payments increase both staff time and banking service costs.

- Stop payments
- Unclaimed checks
- Checks returned for incorrect address

#### **Electronic Payments**

Electronic payments ensure timely receipt and proper delivery of payment. In addition, electronic payments on average run \$.19 per payment (excluding staff time) while check processing runs approximately \$.65 per payment (excluding staff time).

Both measures support enhanced customer service as the customer will receive accurate and timely payment.

#### DEPARTMENTS INVOLVED

Finance

All City Departments

#### BENCHMARK

**Percentage of Successful Payments**: An increase from year-to-year (fiscal) in the percentage of successful payments processed.

**Percentage of Electronic Payments**: An increase from year-to-year (fiscal) in the percentage of electronic payments processed.

#### RESULTS

	FY 20	03 - 04	FY 20	004-05
	#	%	#	%
Successful Payments	39,420*	99.6%	41,151	99.5%
Electronic Payments	16,317	41.2%	18,124	43.9%
Total Payments	39,581		41,	354

<sup>\*</sup>Checks returned for incorrect address were not available for inclusion in this fiscal year.

Our goal of increasing the percentage of successful payments from year-to-year is difficult to evaluate since we were not able to quantify the number of checks returned for incorrect addresses in fiscal year 2003-04. However, if we exclude those checks returned in fiscal year 2004-05, and compare percentages from the two fiscal years, the percentage of successful payments increases from 99.59% to 99.7%.

#### **ANALYSIS**

The City continues to have a very high successful payment rate, and we realize that this is a direct correlation to the number of electronic payments made (in addition to an accurate vendor database). In the early part of 2005, the City actively encouraged employees to sign up for direct deposit for their bi-weekly compensation through a promotional campaign. Through these efforts, an additional 50 employees signed up for this benefit. The success of this program can be seen through the increase in electronic payments from 41.22% to 43.86%.

#### **ACTION PLAN**

Continue to promote electronic payment processing, and take the necessary steps to ensure that all payments being made are as accurate as possible (amount, payee, address, accounts numbers, etc.). We also plan to initiate a pilot accounts payable electronic payment program for select vendors. Based on the success of the pilot program, our goal is to continue to expand the program to include additional vendors.

#### POINT OF CONTACT:

Kevin Branca, Assistant Finance Director, (760) 602-2430, <a href="mailto:kbran@ci.carlsbad.ca.us">kbran@ci.carlsbad.ca.us</a>.

# Administrative Services-

#### FINANCE CALL CENTER - RESOLUTION RATE EFFECTIVENESS

#### THE OUTCOME

A centralized, functional, knowledgeable Finance Call Center.

#### THE MEASUREMENT

The number of requests resolved on the first contact with the Finance Call Center – "One and Done".

#### WHAT THE DATA MEANS

The measure is an indication of staffing levels, staff knowledge, and staff initiative to ensure that calls are resolved in both a timely and effective manner.

#### **DEPARTMENTS INVOLVED**

Finance - Call Center unit.

#### **BENCHMARK**

80% of all priority 1 service calls resolved on the first contact with the Finance Call Center.

#### **RESULTS**

	Benchmark	2005-06
One & Done	80%	TBD
Escalated	> 20%	TBD

#### **ANALYSIS**

Analysis of the call volume by resolution type showed the following results:

Calls	2005-06
One & Done	TBD
Escalated	TBD
Total	TBD

#### **ACTION PLAN**

This is a new measure. The system went live on 6/2/05. We have begun to gather statistics and there will be data to report for fiscal year 2005-06. When the data is available further analysis will be performed.

#### POINT OF CONTACT

Colette Wengenroth, Finance Manager (760) 602-2468, cweng@ci.carlsbad.ca.us.

#### Administrative Services

#### RISK MANAGEMENT - CLAIMS ADMINISTRATION

#### THE OUTCOME

Protections afforded by the claim statutes are observed to the greatest extent possible and claimants receive determinations on their claims in a timely manner.

#### THE MEASURE

The percent of claims with a determination made within 45 days of receipt.

#### WHAT THE DATA MEANS

The departments' efforts to investigate, analyze and make determinations on claims within the statutory timeframe of 45 days are reflected in this measure. If the 45-day time limit passes without a determination, the claim is deemed denied by law and the claimant may sue. Also, the time limit for a suit is extended without a timely and formal determination. Finally, the measure reflects the City's level of responsiveness to claimants. Claimants have a time frame within which to expect claims to be investigated and then accepted, adjusted or denied.

Although not frequent, there are occasions when determinations cannot be made based on the information or lack thereof in the claim, or when prudence dictates postponement of a decision. Some occurrences are on-going and it may be some time before all the facts needed for a determination regarding liability can be made. For this reason, as well as others, it may be in the City's best interest to postpone a decision beyond the 45-day timeframe.

#### DEPARTMENTS INVOLVED

Risk Management, all other departments.

#### **BENCHMARK**

90% of claimants receive a determination on their claim within 45 days.

#### RESULTS

BENCHMARK	FY 2004
90% w/in 45 days	95%

The percent of determinations made within 45 days was derived by dividing the number of claims with determinations made within 45 days by the total number of claims received within the reporting period.

# **ANALYSIS**

2004 is the first year of the measure. The results reflect data collected for calendar year 2004. The results show that the benchmark has been met and exceeded.

#### **ACTION PLAN**

Continue to meet or exceed benchmark.

#### POINT OF CONTACT

Erin Letsch, Risk Manager (760) 602-2470, Elets@ci.carlsbad.ca.us.

#### Administrative Services

# RISK MANAGEMENT – GENERAL LIABILITY EXPENDITURES FOR ALL CLAIMS

#### THE OUTCOME

Minimization of liability expenditures.

#### THE MEASUREMENT

General liability expenditures per capita. The level of expenditures reflect departments' efforts to reduce liability exposure throughout the City.

#### WHAT THE DATA MEANS

The FY 2004 ICMA benchmark is the mean of general liability expenditures, defined as miscellaneous claim expenditures, settlements, investigation fees, attorney fees, court costs and liability insurance premiums for 6 cities, including Carlsbad, under 100,000 in population. The FY 2000 and 2001 ICMA benchmarks were for non-vehicular (non-vehicular means losses related to City vehicles are not included) liability losses per capita (see more on "Benchmark" below). Carlsbad's results were limited to non-vehicular liability losses in FY 2001 only.

#### **DEPARTMENTS INVOLVED**

Risk Management, all other departments.

#### **BENCHMARK**

ICMA's measure was "Non-Vehicular Liability Losses" (non-vehicular means losses related to City vehicles are not included) in FY 2000 and 2001. It was changed to incorporate all liability expenditures where covered under one insurance policy. All data, i.e., population and expenditures, reflect the same period of ICMA's measurement.

#### RESULTS

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
CARLSBAD	\$ 5.74	\$ 2.94	\$ 6.74	\$ 7.35	\$16.17	\$12.30
BENCHMARK	-	\$ 6.71	\$ 9.17	\$10.39	\$ 6.02	\$ 5.32

The amount of \$12.30 was derived by dividing the total FY 2004 City expenditures of \$1,160,920 by an approximate city population of 94,400 for this same time period.

#### ANALYSIS

Carlsbad's liability expenditures per capita for FY 2004 are lower than FY 2003. Carlsbad's expenditures were higher than the ICMA benchmark for the same time period, although less so than last year.

Expenditures were due predominantly to claim and litigation costs, over half of which were the result of one case. Most of the remainder is spread over five cases, all unrelated.

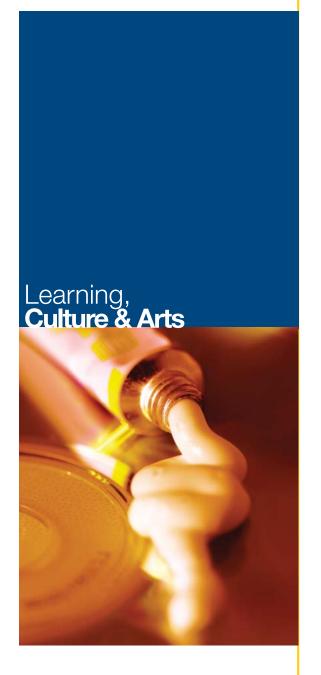
Although better than last year, Carlsbad does not compare well this year against other cities submitting data to ICMA and sharing the population category of less than 100,000. Only one of the cities in this category comprising the benchmark last year submitted data to ICMA this year. This year, ICMA's participants in the less than 100,000 population category are predominantly small cities, with populations of about 30,000 to 50,000.

#### **ACTION PLAN**

Risk Management will continue to use ICMA data for cost comparison purposes, unless a better benchmark is identified.

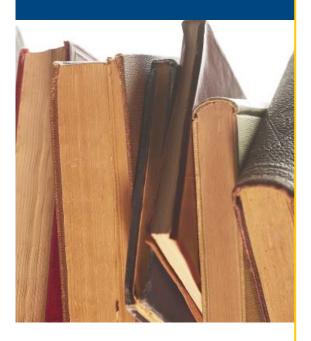
#### POINT OF CONTACT

Erin Letsch, Risk Manager (760) 602-2470, Elets@ci.carlsbad.ca.us.



Promote and support continuous learning, cultural opportunities and the arts within the community and the city organization

Promote and support continuous learning, cultural opportunities and the arts within the community and the city organization

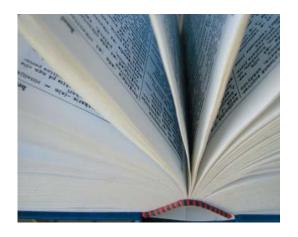


# **Learning Indicators**

- State Library Ranking
- Library Cost Effectiveness
- Library Satisfaction
- Recreational Sportsmanship
- Recreational Customer Service and Satisfaction
- Recreational Cost Effectiveness
- Growth Management Library

# **Management Goals**

- Top Quality Leadership Program
- Learning Center
- Staff Support for Volunteer Program
- Supervisor Training
- Community Development–Skill Assessment and Appraisal

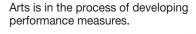


# Library

The Carlsbad Library continues it ranking of 1st out of 33 libraries for cities within California having a similar population. Improvement was shown in three of the 13 categories evaluated. For the third year in row respondents to the Citizen Survey rated Library services as "Good to Excellent" 97% of the time. The Library has also assembled a team of managers to develop a balanced scorecard to establish cost measures related to service delivery standards.

The Library is currently in compliance with the growth management standard regarding square footage of space per capita. Population projections indicate that in 2013 the estimated population will exceed the existing library space. The Library is monitoring the population growth projections and researching expansion needed to meet that standard.

# Arts



# Why is it important to Carlsbad?

An organization that supports learning represents a community that will continue to grow, change and remain vital. Vitality is a key indicator of a community's ability to thrive and compete. Learning enables Carlsbad to remain both a top quality organization and community.





# Recreation

The T.R.U.S.T program (Teaching, Respect, Utility, and Sportsmanship through Teamwork) continues to have a positive effect demonstrated by the continued high rankings received on the customer satisfaction survey. In the Youth Sports Leagues benchmark was achieved with rating of 95%. In the Adult Sports League there is continued improvement over a five year period from 55% to this year's 83%. In 2006 staff will continue to expand all aspects of the TRUST program to all recreational sections including Seasonal Youth Camps, Aquatic, and Senior programs.

In 2005 a comment card system was instituted and the response was extremely favorable from the public with all areas in 90%. While the evaluations were favorable the number of comment cards returned was low. Staff is reviewing the methodology and looking for ways to improve the number of respondents.

The Recreation and Parks operating cost was slightly above the benchmark with an increase this year of \$3.62 per citizen above last year. This total cost increase was affected by normal operating cost increase in addition to opening of two new parks and the increased cost of employee benefits.

# Library Department-

#### STATE LIBRARY RANKING

#### THE OUTCOME

Top quality Library services.

#### THE MEASUREMENT

The Library Development Services Bureau of the California State Library collects statistical data annually from all California libraries. There are 13 basic ratings based on this data that appear annually in CALIFORNIA LIBRARY STATISTICS covering data from the previous fiscal year. The State uses seven population categories for public library rankings. Carlsbad is one of 33 libraries in the 60,000 to 100,000 population category.

#### WHAT THE DATA MEANS

Measurements used in this rating system are basic to all public libraries and, when related to per capita levels of activity, is an accurate way to compare the Carlsbad City Library to other top quality libraries in California. High index ratings are an indicator of excellence and establish benchmarks for both internal and external comparisons.

#### DEPARTMENTS INVOLVED

Library.

#### **BENCHMARK**

The Carlsbad City Library will be ranked above the 90th percentile among public libraries in the state in cities of 60,000 to 100,000 populations. For 2005, the 90th percentile equates to a ranking of fourth or better.

#### **RESULTS**

The benchmark was achieved by reaching an averaged ranking of first. Carlsbad remained in first place, which is the same ranking as last year among the 31 city libraries in California in the 60,000 – 100,000-population category. (Two cities changed population categories this year thereby increasing the total number of libraries from 31 to 33 in the 60,000 – 100,000 range.)

BENCHMARK	2001	2002	2003	2004
5 <sup>TH</sup> or higher	4 <sup>TH</sup>	$2^{\mathrm{ND}}$	1 <sup>ST</sup>	1st

#### **ANALYSIS**

Carlsbad was ranked against 33 other libraries in 13 measurement categories. Compared to the previous year, Carlsbad improved its ranking in 3 categories

(Periodicals, Library Attendance, and Program Attendance). Carlsbad dropped slightly in 3 categories (Librarian FTE, Reference Questions Per Capita, and Registered Borrowers), and stayed the same in all the others. The table below shows how Carlsbad ranks with the top rated public libraries in California in the key measurement categories:

Top Library Rankings						
	Carlsbad	Newport Beach	Santa Monica	Palo Alto	Mountain View	Redwood City
Librarian FTE	4	3	1	2	7	5
Total FTE	1	4	2	6	9	5
Expenditures per cap.	1	7	4	2	8	3
Volumes	4	2	1	8	5	14
Microforms	1	2	13	NR	8	7
Audio materials	1	2	NR	5	4	3
Videos	3	1	NR	5	4	2
Periodicals	1	3	NR	2	9	4
Circulation per cap.	4	2	11	1	3	8
Ref. Questions per cap.	3	1	10	5	6	24
Library attendance	4	3	5	2	6	15
Program attendance	4	12	2	5	6	1
Registered borrowers	5	2	NR	18	6	19
TOTAL:	36	44	49	61	81	110
RANK:	1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>тн</sup>

NR = Not Reported

#### **ACTION PLAN**

Staff will continue to analyze collection use, patron suggestions, and phasing of new technologies to see if they lead to any changes in the Library's performance. Staff will also analyze the value of tracking and measuring categories, such as collection holdings, that are more connected to multiple branches in larger geographical areas. These may not be as valid as per capita measures as indicators of quality or performance. Future measurements may

also need a weighting system, so that emphasis can be placed on categories that are more significant than others.

# POINT OF CONTACT

Cheryl Mast, Management Analyst (760) 602-2014, <a href="mailto:Camast@ci.carlsbad.ca.us">Camast@ci.carlsbad.ca.us</a>.

# Community Services

#### LIBRARY OPERATING COST

#### THE OUTCOME

Efficient use of Library resources.

#### THE MEASUREMENT

Under Development.

#### WHAT THE DATA MEAN

Under Development.

#### STATUS OF THE MEASURE

Under Development.

#### DEPARTMENTS INVOLVED

Library.

#### **BENCHMARK**

To be determined.

#### RESULTS

To be determined.

#### **ANALYSIS**

None Available.

#### **ACTION PLAN**

The Library has assembled a team of managers to develop and implement a balanced scorecard. The purpose of this scorecard is to assist the Library in identifying and evaluating their service delivery standards and cost effectiveness, which ultimately should impact their customer satisfaction. The Library is in the process of creating cost measures that will evaluate several different facets of library services as they relate to both cost and value of services provided. This measure will be available next year.

#### POINT OF CONTACT

Cheryl Mast, Management Analyst (760) 602-2049, Camast@ci.carlsbad.ca.us.

# Learning, Culture, and Arts

#### LIBRARY SERVICES - CITIZEN SATISFACTION

#### THE OUTCOME

High level of citizen satisfaction with the Library services.

#### THE MEASUREMENT

Survey results to the question in the citywide survey, "How do you rate the City's library services?"

#### WHAT THE DATA MEANS

This measure of how the citizens rate their level of satisfaction with the city's library services provides staff with a better understanding of the effectiveness and customer satisfaction with city programs.

#### **DEPARTMENTS INVOLVED**

Library

#### BENCHMARK

90% of respondents rate satisfaction with Library services as "Good or Excellent".

#### **RESULTS**

BENCHMARK	2000	2001	2002	2003	2005
90%	96%	96%	97%	97%	97%

#### **ANALYSIS**

This is the fifth year that the City has asked its residents how they rate their satisfaction with Library services. The trends shown by the survey reflect significant positive ratings from the public at large (less than 1% of the survey respondents rated City Library services as poor). The consistency and level of the rating is worth noting (over 95 % for the past five years).

#### **ACTION PLAN**

The Library staff is working on a more specific survey, which will identify, among other things, services or amenities the customers want but which may not be currently offered. This data will used in developing the next Strategic Plan for Library Services, and ultimately should reflect in a continuation of a high degree of satisfaction of the library's patrons.

#### POINT OF CONTACT

Cheryl Mast, (760 602 2014), <a href="mailto:cmast@ci.carlsbad.ca.us">cmast@ci.carlsbad.ca.us</a>.

# Library Department-

# GROWTH MANAGEMENT /LIBRARIES

#### THE OUTCOME

Adequate facility space to house library services and resources.

#### THE MEASUREMENT

Square footage per capita. The current Growth Management Standard is 0.8 square feet of library space per capita.

#### WHAT THE DATA MEANS

Space (leased/owned, public/non-public) is a standard library measurement of customer use and satisfaction and includes collection space, seating, meeting rooms, staff areas, technology, and other public facility needs. A performance standard for library facilities was adopted by the City Council in 1986 as part of the Growth Management Program's Citywide Facilities and Improvements Plan. This standard was originally developed at that time based on surveys of other libraries of comparable size and based on related standards (such as volumes per capita) set by the American Library Association.

#### **DEPARTMENTS INVOLVED**

Library.

#### **RESULTS**

The Library acquired a new facility location in 2004, which is referred to as the Learning Center. This location currently contains a building with 5,723 square feet of space that is not occupied nor being used for library services to date. Future plans include renovating and expanding the facility in order to house the Adult Learning and Centro de Informacion programs.

The Library owns three facilities and leases two facilities, for a total of 96,874 square feet of leased and owned space.

#### Owned:

Dove Library	64,000 s.f.
Cole Library	24,352 s.f.
Learning Center	5,723 s.f.
Leased:	
Adult Learning	1,359 s.f.
Centro	1,440 s.f.

Based on the benchmark standard and assuming a June 2005 estimated population of 95,146, the library is currently 20,757 square feet in excess of the standard.

#### ANALYSIS

The latest SANDAG forecast estimates the city's build-out population will be 140,980 in 2030. Carlsbad's population would need to reach about 121,093 before it would trigger the need for expanded library space. Growth to this population level is projected to be achieved in 2013, when there will be an estimated population of 122,337.

Additional space needed will likely be programmed into a new Cole Library. When the Adult Learning and Centro de Informacion programs move into the renovated and expanded Learning Center facility, their leased space will be eliminated with a net result of 2,201 square feet of additional owned space.

Additional space will also be added with the possible relocation of existing resources at Cole, such as Genealogy and Local History, to another facility. Some of these steps may need to be taken in the next few years to enable the Library to manage the projected growth of collections until a major expansion occurs.

#### **ACTION PLAN**

Staff will continue to monitor population growth projections, trends in library use, customer service issues, impacts of new technology, and how all of these relate to space needed for resources and services.

#### POINT OF CONTACT

Michele Masterson (760) 602-4600, mmast@ci.carlsbad.ca.us.

# **Administrative Services**

#### EMPLOYEE TRAINING & DEVELOPMENT INVESTMENT

#### THE OUTCOME

To develop a highly qualified and competent staff.

#### THE MEASUREMENT

Human Resources annual training and development expenditures as a percent of total payroll.

#### WHAT THE DATA MEANS

This investment comparison can aid monitoring the fiscally responsible use of funds allocated to Human Resources Training and Development budget.

#### DEPARTMENTS INVOLVED

Human Resources.

#### **BENCHMARK**

According to the American Society for Training and Development's 2002 survey, organizations spend between 1% and 4% of total payroll on training and development.

Expenditure figures include training/instructor fees, supplies, materials and other direct costs. The figures do not include facilities costs, support staff salary or time away from the job.

#### **RESULTS**

	Annual Expenditures
Training Program	FY 2004/2005
Carlsbad Academy	\$141,700
Tuition Reimbursement Program	\$131,900
Fire Department Training	\$ 22,900
Police Department Training	\$ 71,000
Total	\$ 367,500
% of Payroll	1%

#### ANALYSIS

This is a new performance measure. Since Training and Development is not a centralized function, data was collected on only the largest training related programs in the City. The overall cost of city training, including technical training paid for by departments, is difficult to calculate and therefore may be understated.

#### **ACTION PLAN**

The Human Resources Department will continue to analyze training and development expenditures and find more tangible measures of performance. Staff will work with the Finance Department to see if tracking training expenses citywide is possible and feasible. Staff is working on acquiring a better attendance and reporting system in order to gather and provide more reliable data. Currently staff does not have a more comprehensive Learning Management System that will also track expenses.

# POINT OF CONTACT

Rebecca Melillo, Management Analyst (760) 602-2442, Rmeli@ci.carlsbad.ca.us.

#### Administrative Services

#### **EMPLOYEE TRAINING & DEVELOPMENT SATISFACTION**

#### THE OUTCOME

A high level of employee satisfaction with the City of Carlsbad's training and development program.

#### THE MEASUREMENT

The percentage of training survey respondents that "Strongly Agree" or "Agree" with survey statements regarding the effectiveness and value of City-wide training programs.

#### WHAT THE DATA MEANS

The data assesses the current strengths and weaknesses of the City's employee training and development program from the perspective of City staff. Training recommendations will be given based on the analysis of the data gathered.

#### **DEPARTMENTS INVOLVED**

Human Resources.

#### **BENCHMARK**

The benchmark is that 90% of City staff attending citywide training will "Strongly Agree" or "Agree" with the survey statements.

#### RESULTS

Fiscal Year 2004-2005	
Survey Statement	% Strongly Agree or Agree
The instructor was knowledgeable about the topic.	99%
This course was valuable for my job.	92%
Overall, this class was worthwhile.	96%
I am satisfied with the services provided by the City of	
Carlsbad Employee Development Program.	97%

#### ANALYSIS

The data shown is from 280 respondents who participated in 1 or more of 28 different courses offered in fiscal year 2004-2005. The survey data collected clearly demonstrates that the employees who are attending classes are satisfied with the instructors, believe the classes are valuable, and are satisfied with the services provided by the Employee Development Program.

#### **ACTION PLAN**

The objective of the training program at the City of Carlsbad is to improve and enhance the performance of individuals and teams throughout the organization, and to create an organizational environment that encourages and supports lifelong learning. Although the satisfaction data is useful in evaluating whether employees "like" the training offerings, the Human Resources staff is continuing to explore ways to demonstrate the value of the employee development program to the organization through performance measures. Human Resources will also continue to share this information through their annual training report to the organization.

#### POINT OF CONTACT

Rebecca Melillo, Management Analyst (760) 602-2442, Rmeli@ci.carlsbad.ca.us.

# Community Services-

#### RECREATION PROGRAM SPORTSMANSHIP

#### THE OUTCOME

A high level of customer satisfaction, program enrichment and safety through sportsmanship.

#### THE MEASUREMENT

This measure uses a multi-method approach combining:

- Survey results
- Participant complaints/compliments
- Incident reports

The Recreation Department has surveyed participants, coaches and parents on their perception of sportsmanship in our programs. The survey results rate their responses to their perception of sportsmanship, their agreement with the implementation of the Sportsmanship philosophy, and experiences they have had involving sportsmanship in our current programs.

We have collected data on the number of ejections, suspensions and "technicals" administered during our sports leagues.

#### WHAT THE DATA MEANS

The survey results measure the sense of sportsmanship our participants, parents, and volunteer coaches experience and observe in our programs.

The number of ejections, suspensions and "technicals" measure the actual number of customers who are directly affected by their own unsportsmanlike conduct.

#### **DEPARTMENTS INVOLVED**

Recreation.

#### BENCHMARK

This measure is unique to the City of Carlsbad's Recreation Department; therefore the benchmark has been developed through our own surveys. We set an initial benchmark of 90% of all surveys received will rate Carlsbad Sportsmanship program as "very good" or better (4 or 5 on a 1-5 scale).

#### **RESULTS**

The year 2000 figures are statistics taken prior to the implementation of the TRUST program. The year 2001 reflects statistics after introducing the program to league officials, team managers, volunteer coaches, and/or City

Staff. The year 2002 results are after training, implementing and enforcing the program to league officials, team managers volunteer coaches, and/or City Staff. The year 2003 numbers represent statistics after expanding our TRUST program to include all Youth Basketball Officials in the program. The year 2004 numbers represent further expansion and implementation of the TRUST Program to all Adult Sports participants in Softball, Basketball, and Soccer Leagues, and all Youth Sports participants in Basketball, Indoor Soccer Programs, and all contractors of seasonal camps. The year 2005 reflects programmed sports with the Adult and Youth Sports Divisions.

Results of the survey asking, "What are your observations regarding the level of sportsmanship in our leagues?"

#### CARLSBAD ADULT SPORTS LEAGUES

Softball, Basketball, and Soccer

BENCHMARK	2000	2001	2002	2003	2004	2005
90% rating very good or better	55%	67%	74%	78%	80%	83%
Technicals/ejections/suspensions	46/37/37	25/27/15	17/14/6	15/7/4	17/12/4	15/11/3

#### CARLSBAD YOUTH SPORTS LEAGUES

Basketball, Pee Wee Indoor Soccer, and Sports Camps

BENCHMARK	2000	2001	2002	2003	2004	2005
90% rating very good or better	11%	22%	41%	96%	95%	95%
Technicals/ejections/suspensions	43/7/0	35/4/0	26/3/0	13/0/0	8/2/1	13/0/0

#### ANALYSIS

Adult Sports Program: The expansion of our TRUST program in the adult sports softball, basketball and soccer leagues continues to have a positive influence. For the 2005 season's staff focused on further developing of the TRUST program by communicating the Department's expectations of proper sportsmanship to all managers and league participants. Literature is now distributed to all managers prior to each season. Sportsmanship is emphasized on the Sports Division Webpage. It is also promoted at all game locations and at each City athletic Facility through promotional banners and signs displaying the TRUST logo and message.

In the five years since implementing the program, we have seen a significant decrease in the number of technical fouls, ejections and suspensions within the programs and the team manager's have overwhelmingly embraced this philosophy of sportsmanship. We attribute this to the efforts made by the adult sports staff to educate and enforce our sportsmanship philosophy to all

of our adult softball, basketball and soccer league managers, participants, officials, spectators and City staff. Training the team managers and participants involves using the National Alliance for Youth Sports (NAYS) training material that is used by our youth sports program for its volunteer coaches. The overall response and feedback from our league managers has been supportive of continuing this program. Staff has also strived to promote proper sportsmanship behavior in all advertising and marketing of the Adult Sports Leagues, material, awards, schedules, and webpage by continually addressing proper behavior and sportsmanship while participating in our leagues. Over 90% of teams that participate in our Adult Sports Programs enjoy our leagues so much that they return season after season therefore in most cases new teams have to be placed on a waiting list to join our leagues.

**Youth Sports Program:** The youth sports office introduced our TRUST program during the 2001 season of youth basketball. The initial introduction was done at the volunteer coach's level in addition to City staff. The youth sports program deals with four different populations that influence the level of sportsmanship within the program (officials, coaches, parents and youth participants).

During the 2002 season, staff only selected volunteer coach's who were supportive of our TRUST philosophy. We also initiated a coach's clinic to educate and train the volunteer coaches regarding the TRUST program.

Our 2003 season focused on continuing our education of the TRUST Program for officials, volunteer coaches, parents, and staff. The success of our TRUST program in the youth sports arena can be attributed to the training material used from NAYS. With this material, we have successfully trained and retrained our volunteer coaches through the *National Youth Sports Coaches Association* (NYSCA). The parents continue to be educated and certified through the *Parents Association for Youth Sports* (PAYS). The NAYS training program involves certification through educational testing materials, brochures, and training videos.

In the 2004 Youth Basketball Season, Staff has continued with the abovementioned training for all patrons, as well as implementing a "Code of Conduct" for all youth participants to sign with their parent(s).

In the 2005 season, Staff will work on implementing all facets of the Sportsmanship training into the Youth Basketball Program. The Program will also strive to recognize all participants with some type of prize for displaying proper sportsmanship behavior during the program.

#### **ACTION PLAN**

**Adult Sports Program:** The Adult Sports Staff will continue in its effort to further educate and enforce the TRUST program to the league managers and

participants, officials, spectators and City Staff. This will be accomplished by continuing to use the NAYS training material, communicating with the team managers in an on-going basis during the seasons, implementing harsher penalties to discipline violators and mandating all managers to sign a "Code of Conduct" in order to participate in our leagues. The creation of a Department Sportsmanship Video has been discussed as a method of marketing this message to our participants and community.

In 2006 staff will continue to train all managers and participants in softball, basketball, and soccer programs of the TRUST/Sportsmanship Program. Staff will be looking at different ways to promote Sportsmanship.

**Youth Sports Program:** The Youth Sports Staff will continue to educate, train and enforce the TRUST program to City Staff, volunteer coaches, parents, and youth participants through clinics and training opportunities. This will involve requiring re-certification annually for all staff, coaches and parents through the NAYS training program. In 2005 Staff was successful in implementing sportsmanship training as a requirement for all resident Non-Profit Organizations in order to maintain a higher category status for field usage. Council Policy #28 was amended to include these requirements for field users. Staff has also been successful in implementing proper field behavior training sessions for organizations not associated with these types of trainings.

In 2006 Staff will also look at expanding the TRUST/Sportsmanship Program to all Recreation sections. These programs will include, Youth and Adult Sport Programs, Preschool Programs, Seasonal Youth Camps, and Aquatic and Senior Programs. The Program will be implemented during Department activities. Surveys will be taken to measure the success. This information will be included as part of the 2006 Performance Measure Report.

#### POINT OF CONTACT

Gian Lauro (760) 434-2826, glaur.ci.carlsbad.ca.us.

# Community Services

#### RECREATION & PARK PLANNING OPERATING COST

#### THE OUTCOME

Provide Recreation and Park Planning services in a cost effective manner.

#### THE MEASUREMENT

Operating Costs per capita for Recreation and Park Planning Services.

#### WHAT THE DATA MEANS

Tracking Recreation and Park Planning costs per capita provides an opportunity to compare year-to-year costs of these services and an opportunity to compare costs to other cities of similar size and economic composition.

#### **BENCHMARK**

The Operating Cost per capita will not exceed Baseline Budget plus annual CPI.

#### RESULTS

FISCAL YEAR	BENCHMARK	CARLSBAD
02-03	\$52.80	\$52.80
03-04	\$54.75	\$55.30
04-05	\$56.99*	\$58.92

<sup>\* 03-04</sup> benchmark plus 4.1% CPI

#### **ANALYSIS**

Recreation and Park Planning spent \$5,656,613 in fiscal year 2004–05. Utilizing the population figure of 96,000 and the CPI of 4.1% the cost per capita is \$58.92. This is an increase of \$3.62 per citizen over fiscal year 03-04. This increase could be due in part to improvements in our programs, services, trails & parks, including the preparation for the opening of two new parks. Another contributing factor is the increased cost of employee benefits.

#### **ACTION PLAN**

Recreation has a required goal level of a self-sustaining percentage for many programs. An intense analysis of self-sustaining is currently underway. Due to the complexity of this analysis, it is difficult to predict how this particular measure may evolve once that information is ascertained. Once this analysis is complete, the department intends to refine this measure further. This may include removing Park Planning and including the revenue raised through Recreation programs.

#### POINT OF CONTACT

Ken Price (760) 434-2826, Kpric@ci.carlsbad.ca.us.

# Community Services

#### RECREATION CUSTOMER SERVICE & SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction.

#### THE MEASUREMENT

Customer surveys will be distributed at all the Department recreational activity offices.

#### WHAT THE DATA MEANS

Highly satisfied customers are an indication that the Recreation Department is providing services in a satisfactory manner.

#### DEPARTMENTS INVOLVED

Recreation.

#### **BENCHMARK**

90% of customers rate all Recreations services as "Good or Excellent" (4 or 5 on a 1-5 scale) in all customer service survey categories.

# **RESULTS**

	% Respondents at Good or Excellent				
	2001	2002	2003*	2004	2005*†
RECREATION DEPARTMENT					
Staff Courtesy	98	98	96	94	N/A
Staff Knowledge	94	96	93	91	98
Quality of Telephone Contact	91	94	86	85	N/A
Classes/Activities Offered	95	95	87	83	98
Fees – Competitive	92	93	88	84	90
Registration Procedures	89	90	81	83	100
Customer Service					98
Facility Appearance / Operation					95
Overall Rating – Recreation Programs	97	97	92	89	N/A

<sup>\*</sup> Survey methodology changed

#### ANALYSIS

Survey methodology has changed over the years. In 2001 and 2002, the survey was available through handouts provided at the different City facilities and parks. However, upon analysis, staff felt that many residents were not reached. In 2003 the survey was distributed in the water bills of Carlsbad Municipal Water District (CMWD). Through this proves, over 1,000 surveys were returned. A drawback to using CMWD was that they do not service the

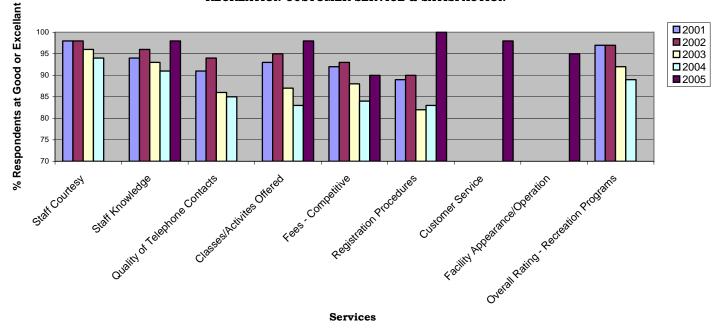
<sup>†</sup> Sample size not representative of community base

entire City, particularly the southern quadrants. In an effort to reach more of the southern portion, the 2004 survey was mailed (bulk) to residents in 92009 not serviced by the CMWD.

Consequently, the number of surveys returned increased to 1,800 in 2004, an 80% increase in participation from the prior year. The cost of expanding survey distribution to southern Carlsbad was more than \$6,800, not including staff costs.

In 2005, staff evaluated the high cost of the business reply mail and printing costs and elected to use comment cards already in use by the Recreation Department. In addition to cost containment, the cards helped us to achieve our action plan goal of creating clear and understandable survey questions. Comment cards were distributed at each of the Recreation Department facilities. Each patron who came to the registration counter or office was asked to fill out a comment card. The card contained major areas of service we wished to survey. The only difference was that it had a four-level rating scale of Exceptional-Good-Fair-Poor. Staff evaluated the ratings from last year and found that less than 0.03% of our survey participants rated the survey questions 1 or poor and that using a numeric 5 (Exceptional), 4 (Good), 3 (Fair), and 2 (Poor) rating scale would give us comparable data to the previous year.

#### RECREATION CUSTOMER SERVICE & SATISFACTION



Although staff made every effort to ask each patron to fill out a card, the response was poor. The number of responses in 2005 was 63. This small

sample does not provide enough data to allow for a valid comparison to previous years.

In preparation for updating the Recreation Department Strategic plan, the Department did contract with SBRI to conduct a Recreation telephone survey. Survey results indicate that Carlsbad Residents feel that Recreation programs offered are important to their household and are of high quality.

#### **ACTION PLAN**

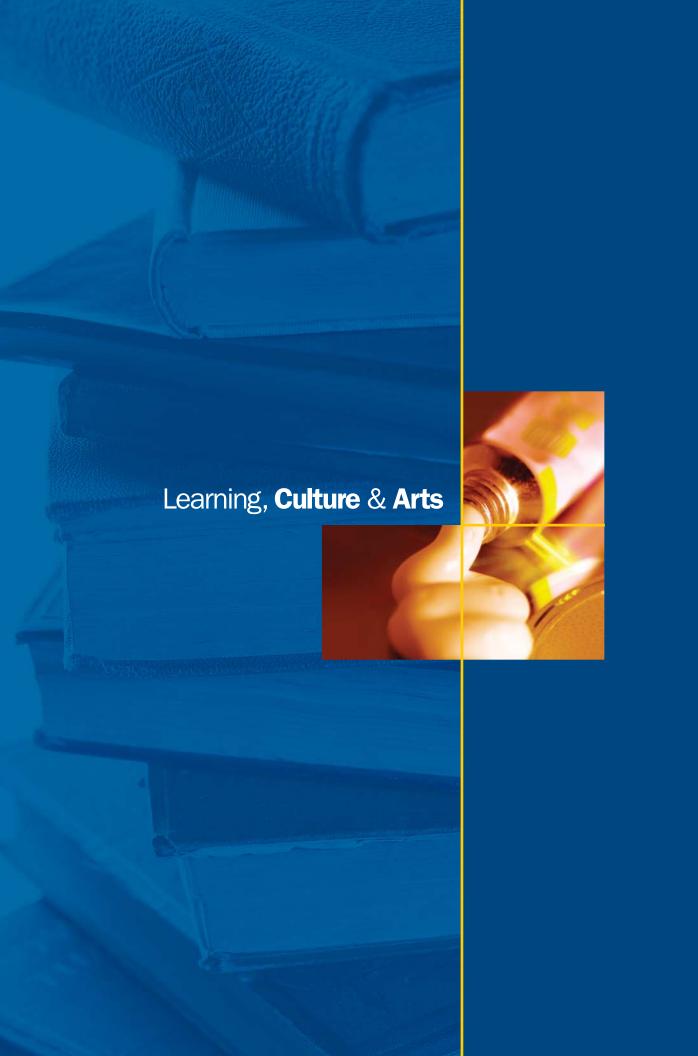
The manner in which the surveys are delivered and the type of survey instrument will be analyzed. The current delivery of surveys was cost effective but did not provide a large enough sample to give valid data or provide an overall rating opportunity. Staff will investigate survey distribution mechanisms including utilizing the internet to email the survey to the thousands of families currently in the CLASS Activity Registration & Facility Reservation data base, and possibly returning to distributing surveys through the water districts or Waste Management bills.

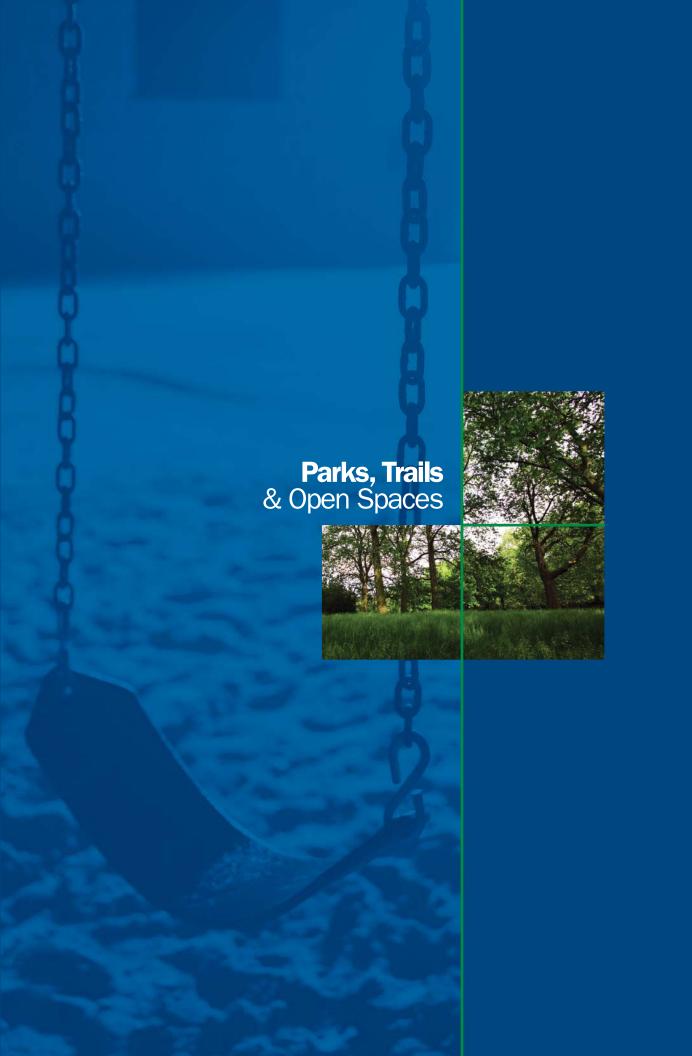
Fee studies for programs and facilities are done annually. This process will continue to make certain that our charges are competitive with neighboring programs.

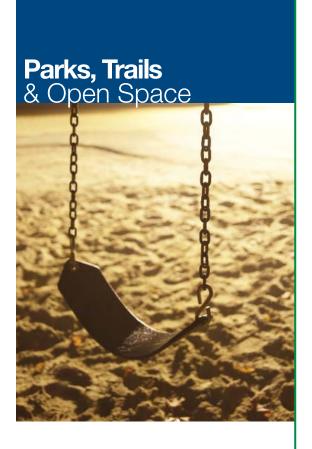
Customer service will remain among the top issues for the Department. Although customer convenience has been enhanced through our online registration site CarlsbadConnect, the Recreation Department is working closely with the IT Department to improve access and timeliness for patrons registering during the first day of our seasonal priority registration periods.

#### POINT OF CONTACT

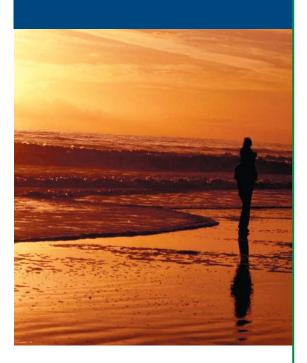
Gail Lynn (760) 434-2826, glynn@ci.carlsbad.ca.us







Acquire, develop and maintain a broad range of open space and recreational facilities that actively address citizen needs which are fiscally responsible and are consistent with the General Plan and Growth Management Standards ... open space and recreational facilities that actively address citizen needs ...



# Parks, Open Space and Trails Indicators

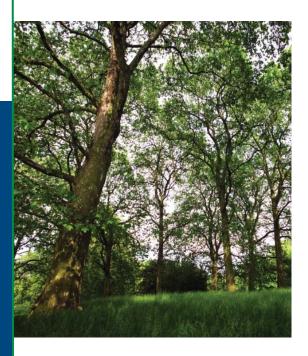
- Park Service Delivery
- Park Maintenance Cost
- Parks Customer Service and Satisfaction
- Trails Service Delivery
- Trails Maintenance Cost
- Trails Customer Satisfaction
- Growth Management Parks
- Growth Management Open Space

# **Management Goals**

- Alga Norte Park
- Senior Center Building Expansion
- Carlsbad City Golf Course Project
- Inventory of Park Trees

# Why is it important to Carlsbad?

Parks, open space, and trails are an important part of the City for those who live, work and play in Carlsbad. They enhance the quality of life by providing attractive, colorful and diverse green spaces. Parks, open space, and trails encourage a healthy lifestyle by creating opportunities for recreation and relaxation. As the open space around the City diminishes, the preservation of natural areas becomes increasingly important.



## **Parks**

This has been an unprecedented year in terms of Parks development. There are three major parks under construction or just completed -Aviara Community Park, Hidden Canyon Park, and Pine Park, and Alga Norte Park is being designed for construction. The Golf Course is under construction and other significant investments, such as Americans with Disabilities Act compliant tot lots and playground equipment and synthetic soccer field turf systems, have been installed at existing parks to improve the experience of local residents. Customer satisfaction of the Parks maintenance reached 94% good or excellent in survey results - the sixth consecutive year over 90%. Maintenance costs are being analyzed, refined, and compared to other agencies in order to economize the cost per acre required for these additional and existing facilities. The City continues to pursue the acquisition of additional parkland to satisfy the Growth Management Standard for park space. There are current park deficiencies in 3 of the City's 4 quadrants, however the City as a whole remains in compliance with the Growth Management Ordinance.



# **Open Space**

The City's commitment to preserving Open Space is reflected in the 20-year old Growth Management Plan standard. Staff implemented the required 15% set-aside property from developers to ensure the City has at least 40% of the total land area as open space at build out. This set aside is in addition to environmentally constrained land that cannot otherwise be developed. It should be noted that Open Space has many forms, active recreational areas, passive recreation areas, public trails, and pristine habitat preserves. The City Council also appointed an Ad-hoc Open Space subcommittee to provide recommendations to the City Council. The City's Habitat Implementation Plan and associated funding mechanism has been completed and approved by the City Council.

## **Trails**

In 2005, Carlsbad exceeded its benchmark of providing 4 miles of trails per year. Overall, about 6 miles of trails were added. These were generally developer provided trails located in the southeast quadrant. However, the City did add a section of the Coastal Rail Trail between Tamarack Avenue and Oak Street. Trails maintenance cost increased in their second year of this performance measurement. This cost is predicted to increase further as trails, equipment, and personnel are added to the trails system.

Acquire, develop and maintain a broad range of open space and recreational facilities that actively address citizen needs ...



#### Public Works

#### PARKS SERVICE DELIVERY

#### THE OUTCOME

Well-maintained and safe parks.

#### THE MEASUREMENT

By utilizing the Maintenance Assessment Program, rate the condition of City parks based on observation by community representatives, government employees, and outside professionals.

#### WHAT THE DATA MEANS

The Maintenance Assessment Program utilizes community representatives, outside professionals, and City employees to rate the overall quality of care a park is receiving. Observers complete a rating form while conducting an onsite evaluation; results are tabulated and an overall score is obtained. Areas of focus include irrigation, turf maintenance, tree maintenance, ground cover, litter control, restroom maintenance, tot lot maintenance, parking lot maintenance, park furnishings, and sports court maintenance. By establishing an objective rating value for City parks, the data from observers can be measured and compared to the established benchmark and opportunities for improvement in procedures, policies and/or methods of operations can be explored.

#### DEPARTMENT INVOLVED

General Services/Parks Maintenance.

#### **BENCHMARK**

90% of the ratings are at or above 7 on a 10-point scale (1 being the lowest and 10 being the highest).

#### RESULTS

BENCHMARK	Fall	Spring	Fall	Spring	Fall
	2003	2004	2004	2005	2005
90%	83%	98%	94%	91%	91%

#### ANALYSIS

This is a measure that uses the Maintenance Assessment Program to obtain feedback from outside observers on the condition of City parks. If the condition of a park is rated low, staff will investigate the issues noted, and take corrective action if appropriate.

In addition to all the normal parks on the assessment list the Downtown area of Carlsbad Village is also included on the MAP tours. The downtown area is a highly visible area of the city and requires many of the same types of maintenance activities as a park. It is frequented by tourists, business people and citizens, and is a central location for a variety of special events.

A breakdown of the ratings for the parks that were evaluated follows:

% Of Responses Greater Than Or Equal To 7

Evaluation Date:	Laguna Riviera	Calavera Hills	_	LaCosta Canyon Park		Poinsettia Park	Magee Park	Holiday Park	Cannon Park	Cadencia	_	Overall rating
Nov. 17, 2003	75%	73%	90%	85%	- 1			84%	-	1	90%	83%
May 5, 2004	100%	100%	98%	93%			96%	98%			98%	98%
Nov. 18, 2004	97%	95%		90%	100%	100%	90%	96%	86%	1	92%	94%
May 26, 2005	90%	96%		88%	95%	100%	91%	90%	79%		95%	91%
Oct. 20, 2005	96%	89%		86%	90%	94%			84%	100%	97%	91%

The most recent fall evaluation resulted in an overall park rating of 91%. This fluctuated between locations from 84% at Cannon Park to 94% at Poinsettia and 100% at Cadencia. The overall results of 91% exceeded the benchmark of 90%. This is considerably higher than the first assessment of Fall 2003 but slightly lower than the 2004 assessments. Specific comments received from the evaluators in the 2005 sessions follow with the plan to address concerns outlined in the action plan section below.

Areas receiving a high rating were the Downtown section of the City, Cadencia, Laguna Riviera, and Poinsettia Parks. The Downtown area had comments that the planter boxes were "amazing", Poinsettia Park received a comment that maintenance is very good and that the citizens of Carlsbad are very fortunate to have such a place.

Areas rating lower in the assessment were Cannon and La Costa Canyon Park. Comments for Cannon Park referred to picnic tables and park benches in need of replacement and a surrounding concrete block wall that is not aesthetically appealing. The portable restroom facility at this site was also pointed out as unattractive. La Costa Canyon Park received comments that the restroom facility required more cleaning and some of the fixtures could use updating.

#### **ACTION PLAN**

• Analyze identified areas of concern and consider the submission of Capital Outlay/CIP during the 06-07-budget process.

- Proceed with plans to enhance Cannon Park with the replacement of old picnic tables, painting of perimeter wall, planting additional vines and trees, and the installation of a screened and handicapped accessible portable toilet.
- Utilize the Hansen information system to summarize staff time allocation and determine where resources are being allocated.
- Complete the hiring of a contract inspector for Parks to assist in obtaining high quality maintenance from the contracted services, such as restroom maintenance.
- Begin Capital Outlay plan to remodel the La Costa Canyon, Laguna Rivera and a Holiday Park restroom. In the interim staff will take measures to update hand drying appliances and the light fixtures where appropriate.
- Begin CIP project at La Costa Canyon Park to add a shade structure/picnic area.
- Begin CIP projects at Scout House, and Stagecoach, Holiday, Hosp Grove, Laguna Riviera, and Poinsettia parks for upgrading ADA compliant tot lot equipment/rubberized matting.

#### POINT OF CONTACT

Kyle Lancaster, Parks Supervisor (760) 434-2941, Klanc@ci.carlsbad.ca.us.

#### Public Works

#### PARK MAINTENANCE COST

#### THE OUTCOME

Park cost efficiency.

#### THE MEASUREMENT

#### Cost per Acre

Maintenance cost per acre (annual actual expenditures/total acres of developed parkland, roadside vegetation abatement, and downtown planter/tree maintenance). This measurement excludes costs for capital expenditures.

#### Acres Per FTE

This measure could be compared to other jurisdictions once the basis for determining what acreage should be included in the calculations is finalized. The Park acreage figure used below is the developed Park acreage number. The FTE figure used in the table includes full and part-time Park staff, less management and clerical support staff.

#### WHAT THE DATA MEANS

A goal for the Park Maintenance Department is to provide aesthetically appealing, well maintained parks, roadsides and high profile planter/tree areas. This measure can demonstrate fiscally responsible use of funds allocated to park maintenance, and show how resources are being used to achieve the identified goal.

#### DEPARTMENT INVOLVED

General Services/Parks Maintenance.

#### **BENCHMARK**

#### Cost Per Acre

Carlsbad's Cost per acre will not exceed the benchmark of \$10,463. This benchmark is calculated by taking the base year's benchmark and adjusting it by the San Diego Consumer Price Index each year (4.1% in 2003, 3.7% in 2004, and 3.3% in 2005).

#### Acres Per FTE

The benchmark is to be determined as this is the first year of this measures use.

#### RESULTS

#### Carlsbad Cost Per Acre

Carlsbad	Expenditures	Total Acres	Benchmark	Cost/Acre
2003	\$2,782,299	270	\$9,692	\$10,305
2004	\$3,079,933	278	\$10,051	\$11,078
2005	\$3,311,116	278	\$10,383	\$11,910

#### **ANALYSIS**

The results of our historical cost analysis show that park maintenance costs per acre increased by a rate of 7.5% over last year, which is greater than the CPI adjustment to benchmark. Several factors have contributed to this increase. First, additional responsibilities have been placed on staff in this division as reviews of the Assessment Districts related to Tree and Median Maintenance have resulted in a realignment of both staff and work activities. Additionally, the City's park base, including open space is expanding. The Parks department must work closely with other related programs such as Trails, Tress and Median maintenance to manage this growth. Finally, personnel and benefits costs increased by 16.4% over the last year. All of these factors should begin to stabilize in the near future leading to more consistent increases over the new few years.

#### Benchmark Partner Cost Data

Agency	FY 2005 Expenses	Total Acreage	Cost Per Acre
Carlsbad	\$3,311,116	278	\$11,910
Chula Vista	\$4,535,490	420	\$10,799
San Diego County City*	\$1,506,373	224	\$6,725
Santa Clara	\$4,912,800	236	\$20,817

<sup>\*</sup> City did not wish to be identified.

Benchmark partners were asked for cost data this year, and the responses are shown in the table above. There is more investigation required to examine what criteria the partners used to determine which acreage they included, (e.g. developed parkland vs. open space reserves) as well as which expenditures they included. For example the San Diego County City does not include water costs as the city receives free water from the water utility for parkland. In addition, the level of service and maintenance that each partner provides plays a role in the level of costs incurred.

Parks Acres per FTE excluding Management and Clerical Support

	Non-Admin					
2004-05	FTE	Total Acreage	Acres per FTE			
Carlsbad	24.4	278	11.4			
Chula Vista	42	420	10.0			
Santa Clara	44.5	236	5.3			
San Diego County City	17	224	13.2			

The acreage per FTE data above shows benchmark partner cities figures for comparison to Carlsbad's figure of 11.4 acres per FTE. Santa Clara maintains 5.3 acres of parkland per FTE; Chula Vista maintains 10 acres per FTE versus the San Diego County City that maintains 13.2 acres per FTE. The San Diego County City stated that they used volunteer teams and community service groups for hire to augment the regular city staff. Of note, the acreage per FTE data reflects the first year we have collected this data and as such represents a work-in-progress that will need to be refined as more data is collected.

#### **ACTION PLAN**

- Continue working with partner cities to learn more about the different maintenance standards and/or procedures. Ultimately, determine methods to perform maintenance activities more efficiently.
- Continue to refine measures and examine the balance of maintenance work between contractor and City staff.

#### POINT OF CONTACT

Kyle Lancaster, Parks Supervisor (760) 434-2941, Klanc@ci.carlsbad.ca.us.

#### Public Works

#### PARKS CUSTOMER SERVICE AND SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction.

#### THE MEASUREMENT

Annual City of Carlsbad Public Opinion Survey.

#### WHAT THE DATA MEANS

Highly satisfied customers are an indication that we are providing services in a manner that is desired and/or expected.

#### DEPARTMENT INVOLVED

General Services/Parks Maintenance.

#### **BENCHMARK**

90% of customers rate the condition of developed parks at "Good" to "Excellent" as reported in the annual City of Carlsbad Public Opinion Survey.

#### **RESULTS**

City of Carlsbad Public Opinion Survey

BENCHMARK	2000	2001	2002	2003	2004	2005
90%	90%	95%	91%	94%	92%	94%

#### **ANALYSIS**

The benchmark for the City of Carlsbad Public Opinion Survey has been met for the sixth consecutive year. The Parks Department survey results achieved an overall rating of 94%.

#### **ACTION PLAN**

- New CIP projects are being planned for next year that should improve and/or maintain customer satisfaction levels. Projects that have been initiated but not yet completed include restroom remodels at Holiday Park and Laguna Riviera Park, and ADA compliant rubberized surfacing in place of sand in several tot lots, including Laguna Riviera Park.
- Include the newly constructed Aviara and Hidden Canyon Parks in next year's evaluation.
- Complete survey and utilize the customer's feedback, to explore opportunities for improvement.

#### POINT OF CONTACT

Kyle Lancaster, Parks Supervisor (760) 434-2941, Klanc@ci.carlsbd.ca.us

#### Community Services-

#### **GROWTH MANAGEMENT - PARKS**

#### THE OUTCOME

To provide adequate parkland that will support the recreational needs of those that live, work and play in Carlsbad.

#### THE MEASURE

The Carlsbad Park Standard identified in the Parks and Recreation Element of the City's General Plan is as follows:

 Special Use Areas: 0.5 acres/1,000 population
 Community Parks: 2.5 acres/1,000 population 3.0 acres/1,000 population

Collectible standard

Per Quimby Ordinance & Growth

Management Standard

Special Resource Areas: 2.5 acres/1,000 population
Overall Park Standard: 5.5 acres/1,000 population

Provisions for recreation facilities in the industrial zone are based upon, and provided for by the collection of \$ .40/square foot of industrial development. There is no standard of acreage exclusively for the industrial based population.

#### WHAT THE MEASURE MEANS

According to the "Citywide Facilities and Improvement Management Plan", the growth management standard for parks that must be provided concurrent with growth is 3 acres/1,000 population.

Carlsbad's standard for park adequacy is based upon the collective amount of Special Use Areas and Community Parks within each of the four quadrants of the City. The collective acreage within each quadrant is then compared to the population of each quadrant to ensure adequacy.

A standard of 3 acres per 1,000 population is an accepted level of park space to meet active or passive recreational needs. In addition, a standard of 3 acres per 1,000 population insures a fiscally responsible maintenance and operation program that is allocated on an annual basis and required to sustain a safe and aesthetically pleasing recreation facility.

The overall park standard of 5.5 acres/1,000 population has been in existence since 1982. The standard includes Special Use Areas, Community Parks and Special Resource Areas. For the most part, the majority of those collective

acres within Carlsbad belong to the Special Resource Area classification. They are typically sites that are over 100 acres in size and are of a unique character such as lagoons and beaches. These amenities are typically outside the operational jurisdiction of the City of Carlsbad and require little if no operating expense.

For the purposes of the Growth Management Monitoring Report, the citywide population figures are derived from information provided by the California Department of Finance. The per quadrant population figures are determined by the number of dwelling units in each quadrant, multiplied by a density figure of 2.3178 persons per dwelling unit.

#### **DEPARTMENTS INVOLVED**

Recreation Department.

#### **BENCHMARK**

The park adequacy standard means 3 acres of Special Use Area and/or Community Park, either active or passive, per 1,000 population. Because of an existing Joint Use and Maintenance Agreement that the City and School District(s) operate under, several school sites are included within the park inventory under Special Use areas. Those sites have been "Grandfathered" into the parks inventory and as of 1986, no further school sites will be included within the park inventory. Currently there is a total of 32.2 acres of school property being counted as park acreage; 20.4 ac. in the Northwest Quadrant, 2.8 ac. in the Northeast Quadrant, 5 ac. in the Southwest Quadrant and 4 ac. in the Southeast Quadrant.

The measured park acreage needs to be existing and open to the public. If it is not existing, it must be developed within a five year period or prior to construction of 1,562 dwelling units within the park district beginning at the time the need is first identified in accordance with the Growth Management Ordinance.

#### **RESULTS**

The current population in each quadrant, compared to the existing and planned park acreage in each quadrant determines park adequacy. That level of adequacy is 3 acres of parkland for each 1,000 population. The required park acres to population ratio are in a shortfall situation at this time in three of the four city quadrants. In accordance with the Growth Management Ordinance, acquisition, planning, and development efforts are taking place to ensure compliance with the Ordinance. The Parks Performance Standard of the Growth Management Plan is in compliance with the Growth Management Ordinance.

#### **ANALYSIS**

The population figures that the department currently uses are based upon the Finance Department's "Growth Projection" chart. This population figure includes units built through January 1, 2005. The equation to determine population is based on the number of units built, multiplied by 2.3178 people per unit.

The matrix presented below illustrates the status of the Park Performance Standard in each of the City's four park districts. Park acreage amounts are based upon Community Park (Com.) and Special Use Areas (SUA) collective acreage totals.

QUADRANT	CURRENT POPULATION	REQUIRED ACRES COM & SUA	EXISTING ACRES COM & SUA	CURRENT SURPLUS/ DEFICIT
NW	28,809	86.42 acres	79.90	- 6.52 acres
NE	13,019	39.05 acres	20.00	-19.05 acres
SW	22,029	66.08 acres	71.25	+ 5.7 acres
SE	33,366	100.09 acres	73.34	-26.75 acres

The City is currently in a shortfall situation in the Northwest (-6.52 acres), Northeast

(-19.05 acres.), and Southeast quadrant (-26.75 acres.).

#### **ACTION PLAN**

**Northwest Quadrant:** The Quadrant is currently in a shortfall situation of 6.52 acres of parkland. The Pine Avenue Park at the site of the former Pine School is currently under construction. Construction began in May of 2005 with completion anticipated by the second quarter of 2006. This park will add an additional 7+ acres to the inventory of the Northwest Quadrant, which will bring the park acreage to a surplus based on the current population in this quadrant.

**Northeast Quadrant:** To meet the current park shortfall of 19.05 acres in the NE Quadrant, the entire Hidden Canyon Community Park (22.2 acres) will be developed and opened for public use by early 2006. The quadrant will then be in compliance with the Growth Management Ordinance. Another source of park acreage within the NE Quadrant will be the acquisition of an additional 10-15 acres. Although acquisition of a site is currently being pursued, at this time, its development and subsequent acreage amount is not required to meet the Park Performance Standard for the Quadrant.

**Southwest Quadrant:** Currently, the western half of Aviara Community Park is open and being utilized by the public. The eastern half of the park site is presently undergoing a maturation process to ensure longevity of the landscape. A dedication ceremony for the 24.25 acre park is anticipated in

early 2006. The quadrant will be in compliance with the Parks Performance Standard at that time and will have in excess of 5 acres of parkland.

**Southeast Quadrant:** The current park acreage shortfall in the quadrant is 26.75 acres. Staff is currently processing plans and specifications for the park Master Plan for the 30 acre Alga Norte site. It is anticipated to be completed by the second quarter of 2007. This will assure continued compliance with the Growth Management Ordinance as the site will add 30+ acres to the park inventory in that quadrant.

#### POINT OF CONTACT

Ken Price (760) 434-2826, Kpric@ci.carlsbad.ca.us.

#### Community Services

#### CITYWIDE TRAILS PROGRAM - SERVICE DELIVERY

#### THE OUTCOME

A multi-use recreational trail system that addresses the recreational and leisure needs of Carlsbad residents while supporting the protection and preservation of open spaces in accordance with the City of Carlsbad General Plan.

#### THE MEASUREMENT

This measure will monitor and track the expansion of the Citywide trail system by providing increased trail mileage each year.

#### WHAT THE MEASURE MEANS

The Citywide Trails Master plan identifies approximately 58 miles of multi-use recreational trails to be completed at build out in Open Space areas of the City. Approximately 90 miles of Circulation Element Trails will be built as part of roadway sidewalks and bike lane construction. Some of these trails are completed. Many of the trails will be built as part of private development. The remaining trail mileage is to be constructed by Citywide Trail volunteers as part of the Citywide Trail Volunteer program.

This measurement will literally measure how many miles of trail are being added on an annual basis to the Trails system.

#### **DEPARTMENTS INVOLVED**

Recreation/Park Planning Division Planning Parks

#### **BENCHMARK**

The amount of trails made available to the public depends upon 3 factors:

- 1. The amount of trail mileage being built as part of private development.
- 2. The amount of trail mileage being adopted into the system as part of Trail Easement Agreements for outstanding IODs
- 3. The amount being built by Citywide Volunteers.

The benchmark for expanding the trail mileage on an annual basis will be 4 miles per year. This is based upon the above 3 factors and the pattern of trail development thus far.

#### RESULTS

The chart below summarizes the trail mileage for multi use recreational trails that were made available to the public from 2002-2004.

Year	Trail Name	Length (Miles)	Constructed By
Existing			
2000	Hosp Grove	<3>	Volunteers
2002-03	Rancho Carrillo	4.0	Private Dev.
2002-03	La Costa Valley	1.3	Private Dev.
2003-04	Arroyo Vista	0.5	Private Dev.
2003-04	Villagio	0.5	Private Dev.
2003-04	La Costa Glen	1.5	Private Dev.
2003-04	Hidden Canyon Park	0.25	Volunteers
2003-04	Poinsettia Lane	0 .25	Private Dev.
2003-04	College Ave.	1.0	Private Dev.
2004	Total Trail Mileage	14.0	

#### ANALYSIS

In 2005, Carlsbad exceeded its benchmark of providing 4 miles of trails per year as summarized in the chart below.

	Trail	Length	
Open Space Trails	Surface	in miles	Construction
	Paved/old		
Villages of La Costa-The Ridge	RSF Road	1.0	Developer
Total		1.0	
Circulation Element Trails			
Poinsettia Lane- VLC- The Greens	Unpaved	2.1	Developer
El Fuerte- Bressi Ranch	Unpaved	1.0	Developer
Alicante Rd Bressi Ranch	Paved	1.0	Developer
Total		4.0	-
Special			
Coastal Rail Trail		0.7	City
Total New Citywide Trail Mileage 2005		5.8	-

This Performance Measurement has been met for 2005 and is due mainly to the construction of trails as part of private development and the Phase I construction of the Coastal Rail Trail.

#### **ACTION PLAN**

Continue to require public trail easements and the construction of trails as part of ongoing private development for trails identified in the Citywide Trails Master Plan that fall within private development areas.

Continue to process Acceptance Agreements for Irrevocable Offers of Dedication(IODs) for Citywide public trail easements that were previously rejected as part of private development.

Continue the construction of those trails that have been identified in the Trails Master Plan that will occur on public lands. (Examples: Lake Calavera and Veterans Park).

#### POINT OF CONTACT

Liz Ketabian (760) 434-2826, <u>Lketa@ci.carlsbad.ca.us</u>.

#### Community Services

#### CITYWIDE TRAILS PROGRAM - CUSTOMER SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction with Citywide Trails.

#### THE MEASUREMENT

City of Carlsbad Public Opinion Survey.

#### WHAT THE MEASURE MEANS

The survey will indicate if citizens are satisfied with the development of trails throughout the City and if the Department is reaching its goal of increasing access to Open Space. It is anticipated that this measure will change once the trail system is built out.

#### **DEPARTMENTS INVOLVED**

Recreation/Park Planning Division Planning Parks Maintenance

#### **BENCHMARK**

90% of all surveys received will rate Carlsbad trails as good or excellent.

#### **RESULTS**

This is a new measure, no data from the survey is available this Fiscal Year.

#### **ACTION PLAN**

Include trail questions in the 2006 Citywide survey.

#### POINT OF CONTACT:

Liz Ketabian (760) 434-2826, <u>LKeta@ci.carlsbad.ca.us</u>.

#### Community Services

#### CITYWIDE TRAILS MAINTENANCE COSTS

#### THE OUTCOME

Trails maintenance cost efficiency.

#### THE MEASUREMENT

Maintenance cost per mile (total miles maintained/annual expenditures). This measurement excludes costs for Capital Improvement Projects.

#### WHAT THE MEASURE MEANS

A goal for the Recreation and Parks Maintenance Departments is to provide well-maintained and safe trails for those using them to walk, hike, bike, jog, or view nature.

This measure will demonstrate fiscally responsible use of funds allocated for trail maintenance and indicate how volunteer resources are being used to supplement the maintenance program for the trails.

#### DEPARTMENTS INVOLVED

Recreation Department and Parks Maintenance.

#### **BENCHMARK**

The benchmark is subject to change and may need to be adjusted in accordance with the number of volunteer resources available to supplement the City's Parks Maintenance staff.

#### RESULTS

For the past two years citywide trail maintenance and operations have been performed within the amounts budgeted for the program. Annual Maintenance and Operations costs for the trails are currently estimated at \$3,276/mile. However, it is important to note that the amount budgeted for Maintenance and Operations in the past few years also includes materials and equipment costs for construction of new trails by Citywide trail volunteers.

The table below indicates a summary of the miles of trails constructed/maintained over the past two years, the actual expenditures, and the cost per trail mile.

Fiscal Year	Total Miles Maintained	Actual Expenditures	Maintenance Cost Per Mile
2003-2004	8	\$20,381	\$2,548
2004-2005	12.5	\$40,951	\$3,276

#### ANALYSIS

Maintenance costs have increased as additional trails have been added to the citywide trails system. Salaries, materials, tools, and equipment needs have been adjusted in the Citywide Trails Budget to reflect these increases. The increased maintenance cost of \$728 per trail mile in FY 04-05 was partially due to added construction by trails volunteers (e.g., Rancho Carrillo ADA Ramp, kiosks, signs/markers, and other improvements). The maintenance cost per mile is expected to further increase in FY 05-06, as a result of the incorporation of City Council approved budget additions to staffing and materials. These additions were approved in order to allow for the continuing construction and maintenance of the Citywide Trails System at a level that is appropriate to the citizens of Carlsbad's needs.

Previous research and information from other municipalities in the region with similar trails programs, was utilized to determine an initial cost per mile of maintenance. This figure ranged between \$2,500 and \$5,800 per trail mile.

#### **ACTION PLAN**

In FY 05-06 the City Council approved the addition of a Parks Maintenance position whose duties will include Citywide Trails System maintenance. The recruitment is expected to be completed by January 2006. The person hired will provide maintenance assistance on the existing trails, and the balance of the 8.5 miles of trails projected to be accepted in FY 05-06. This addition increases the Parks Maintenance Department's ability to coordinate and maintain the trail system to ensure user safety and enjoyment.

Since the implementation of the Citywide Trails Program began in 2002, the City has also utilized Trails Volunteers to assist in the maintenance and construction of trails. It is recommended that the use of the Citywide trail volunteers continue, as they are a valuable resource for providing and assisting Parks Maintenance staff in the effective delivery of well maintained trails to the public. As the amount of trail mileage increases, and as the number of volunteers fluctuates, adjustments will need to be made for the amount of Park Maintenance staff required to provide the maintenance care established by the Parks Department *Citywide Trail Maintenance Plan*. A Citywide Adopt-A-Trail Program will also be considered for possible future implementation.

Over the next several years, a new benchmark will be established based on internal historical data and industry standards. It is anticipated that the maintenance costs per mile will steadily increase each year as private development and volunteer construction efforts continue. This pattern is expected to level off as the Citywide Trails System nears build-out.

#### POINT OF CONTACT

Liz Ketabian, (760) 434-2826) - Recreation, Lketa@ci.carlsbad.ca.us.

#### Community Development

#### GROWTH MANAGEMENT - OPEN SPACE

#### THE OUTCOME

A comprehensive, connected open space system that protects and conserves the City's natural resources.

#### THE MEASUREMENT

The amount of land set aside for permanent open space. At build-out of the City, there will be approximately 40% of the land area in the City set-aside for permanent open space.

#### WHAT THE DATA MEANS

At the time of preparation of the Growth Management Plan, it was determined that an additional amount of open space (15%) needed to be set-aside in all areas of the City. This open space dedication is in addition to the environmentally constrained land that cannot be otherwise developed. Local Facility Management Plans have also been adopted to designate which additional land needs to be set aside.

#### **DEPARTMENTS INVOLVED**

Planning

#### **GROWTH MANAGEMENT STANDARD**

Fifteen Percent (15%) of the total land area in each of the 25 Local Facilities Management Zones must be set-aside for permanent open space and must be available concurrent with development. This does not include environmentally constrained, non-developable land.

#### RESULTS

At build-out of the City, as a result of this Growth Management Standard, there will be approximately 40% of the land area in the City set-aside for permanent open space. This is a product combining the 25% environmentally sensitivity open space and the 15% additional requirement of this Growth Management Standard.

#### **ANALYSIS**

The performance standard is working as anticipated.

#### **ACTION PLAN**

Continue to determine the acreage and location of the 15% performance measurement open space land at the time of preparation or amendment of Local Facility Zone Management Plans. Require land to be set-aside at time of

individual project development. Over the next five years, it is anticipated that substantial amounts of open space will be set aside in compliance with the performance standard as a result of major projects such as Robertson Ranch and the Villages of La Costa.

#### POINT OF CONTACT

Michele Masterson(760) 602-4600, mmst@ci,carlsbad.ca.us.





Be a city that provides exceptional services on a daily basis

# Be a city that provides exceptional services on a daily basis



# **Top Quality Service Indicators**

- Overall Citizen Satisfaction with City Services
- Facilities Service Delivery
- Facilities Maintenance Cost
- Facilities Customer Service and Satisfaction
- Fleet Availability, Maintenance, Repair Cost & Customer Satisfaction
- Human Resources Injured Employee Time Off
- Human Resources Employee Turnover Rate
- Human Resources Cost Efficiency
- Information Technology Network Operability
- Information Technology Cost Efficiency
- Information Technology Service & Satisfaction
- Growth Management/City Administrative Facilities

### Goals

- Performance Measurement Resource Team
- Technology Disaster Recovery Plan
- Human Resources Business Process Plan
- Integrated Financial & Personnel Management Systems
- HR Service Center Work Processes
- Library Balanced Scorecard Implementation
- Library Information Security/Privacy
- Recreation Department Marketing & Sponsorship Guidelines
- Naming Rights for City Facilities
- New Customer Service Initiative
- Section 8 Management Administrative Handbook
- PUD/Code Modifications
- Land Status Database
- Facilities Replacement Program Implementation
- Capital Improvement Projects
- Standard Operating Procedures for Maintenance & Operations
- Performance Improvement for Sanitation Operations
- Capital Improvement Projects
- Water & Sewer Work Management Program
- Assessment of Public Works Administrative Support Operations
- Contract Maintenance Inspection
- Downtown Maintenance/Enhancement Program



- Parks' Tot Lot Improvements
- Public Works Contract Electronic Bidding
- Irrigation and Landscape Enhancement
- Fleet Inventory Control Program
- Fleet PM Maintenance Benchmarking Study
- Performance Improvement for Water Operations
- Technology Enhancement
- Construction Project Transition
- Northwest Quadrant Storm Drain Study
- Construction Specification Institute (CSI)
   Contract Document Update
- PW Performance Measurement Program
- CM Records Retention Update
- Management Goal Administration
- Citywide Customer Service Initiatives
- Leadership Team Achievement of MSA Goals
- Rancho Carlsbad Flood Control
- Maintenance Program Update
- Library Service Reorganization
- Tow Contracts

# Why is it important to Carlsbad?

The City of Carlsbad is a full-service city providing a broad range of services, including: municipal water and sewer, refuse collection, police and fire services, and a public library system. Citizens expect their municipal government to provide services in the most effective and efficient manner possible. The Top Quality Services grouping is comprised of the internal, support areas of the City which enable the Citizen-facing City departments to accomplish their public mission.

The City uses a yearly public opinion survey as one way to determine satisfaction with municipal services that affect residents' daily lives, such as street maintenance, trash collection and public safety. Such surveys enable to the City to identify strengths and weaknesses in the provision of services. The physical condition of City parks and facilities has a measurable impact on the resident's quality of life as well as the perception of visitors.



# **Current Results**

- Citizens continue to have a very high level of satisfaction with the services provided by the City as measured by the city-wide survey.
- The number of days lost per injured employee claim is 37 days more than the ICMA average for cities our size. While the ICMA average days lost per claim decreased, the City of Carlsbad increased by 30 plus days.
- City facilities evaluated under the Maintenance Assessment Program were rated very highly by the observation teams. 94% of the respondents rated the overall condition of City facilities 7 or above on a 10 point scale. This rating exceeded benchmark for the fourth consecutive measurement cycle (Spring / Fall observations).
- The maintenance costs per square foot of building space is \$0.34 above the national mean, exceeding the benchmark.
- Fleet Maintenance costs are in-line with national standards, availability of vehicles is strong, and a new vehicle liaison program promises to increase timeliness of preventative maintenance services.
- The employee turnover rate for the City of Carlsbad is about 2 percentage points less than the ICMA average.
- The City's technology network is stable and functioning at a high level—88% of priority 1 and 97% of priority 2 calls are resolved within the goal time-frames.
- Customers of the Information Technology Department expressed a high level of satisfaction with the services offered and received. Just under 5,000 requests for technology service were processed by the department last year.



# **Growth Management**

There are adequate City Administrative Facilities for the current population in Carlsbad, and the City is in conformance with the Growth Management Ordinance for City Administrative Facilities.

## **Trends and Observations**

- Across the six years of the survey, the evaluation of Overall City Services has been very positive – over 90% of respondents have given ratings of Excellent or Good in each year. In 2005, the percentage of respondents rating city services as Excellent was the highest of any year surveyed.
- The increase in expenditures for Facilities is due to an increase in associated personnel costs (34%) and an increase in contracted services (64%)
- Police Department employees were responsible for over 60% of the Carlsbad's lost working days due to injury with a total of 628 "lost days." The Fire Department has improved in this area significantly over the last year, with a total loss of 193 days. Police and Fire employees together were responsible for 79% of the lost days. Senate Bill 899 / Workers' Compensation Reform will play a significant role in reducing worker's compensation costs. City staff is actively pursuing worker's compensation claim closure and will work towards integrating and maximizing the efforts of accident prevention and claims management.

#### Citywide

#### OVERALL CITIZEN SATISFACTION WITH CITY SERVICES

#### THE OUTCOME

High level of citizen satisfaction with the overall City services.

#### THE MEASUREMENT

Survey results to the question in the citywide survey, "How do you rate the overall city services?"

#### WHAT THE DATA MEANS

Part of the City of Carlsbad's mission is to provide top-quality services to all those who live, work, and play in the City. This measure of how the citizens rate their overall level of satisfaction with city services provides staff with a better understanding of the overall effectiveness of city programs.

#### DEPARTMENTS INVOLVED

Citywide.

#### **BENCHMARK**

90% of respondents rate their satisfaction with overall City services as "Good or Excellent".

#### **RESULTS**

BENCHMA	RK 2000	2001	2002	2003	2004	2005
90%	92%	96%	95%	96%	91%	92%

#### **ANALYSIS**

This is the sixth year that the City has asked its residents how they rate their overall satisfaction with City services. As was the case last year, the trends reflect significant positive ratings from the public at large (less than 1% of the overall survey respondents rated City services as poor). The consistency of the rating is worth noting (over 90 % for the past six years), and continues to be above the benchmark.

Through prior evaluation, staff has determined that a correlation exists between how respondents rate the City on land use, communication, confidence in Local Government, and overall services that the City provides. These numbers stayed fairly consistent with last years, thus the relatively small amount of change in the results.

#### **ACTION PLAN**

Continue to monitor and evaluate the overall satisfaction of city services. Continue to work to increase citizen satisfaction in communication, the City's use of land, and Citizen confidence in the local government.

#### POINT OF CONTACT

Joe Garuba (760)434-2820, <u>Jgaru@ci.carlsbad.ca.us</u>.

#### Public Works

#### **FACILITIES SERVICE DELIVERY**

#### THE OUTCOME

Well-maintained and safe facilities.

#### THE MEASUREMENT

The condition of city-owned buildings based on observation by community representatives, City employees, and outside professionals.

#### WHAT THE DATA MEANS

The recently implemented Maintenance Assessment Program (MAP) utilizes community representatives, outside professionals, and City employees to rate the overall quality of care a facility is receiving. Observers complete a rating form while conducting an on-site evaluation, results are tabulated and an overall score is obtained. Areas of focus include exterior maintenance, interior maintenance, interior general space custodial services, and restroom cleaning. By establishing an objective rating value for City-owned buildings, the data from observers can be measured and compared to the established benchmark and opportunities for improvement in procedures, policies and/or methods of operations can be explored.

#### DEPARTMENT INVOLVED

General Services/Facilities Maintenance.

#### **BENCHMARK**

90% of the ratings are at or above 7 on a 10-point scale (1 being the lowest and 10 being the highest).

#### RESULTS

BENCHMARK	Fall	Spring	Fall	Spring	Fall
	2003	2004	2004	2005	2005
90%	89%	98%	96%	96%	94%

#### **ANALYSIS**

This measure utilizes the Maintenance Assessment Program to obtain feedback from outside observers on the condition of City facilities. If the condition of a facility is rated low, staff will investigate what caused the low score, and take corrective action if appropriate.

Last year's MAP results included the first full-scale assessment conducted in the fall of 2004. Since that time we have conducted two reviews during 2005. In each review, two observer teams consisting of three to four raters visited a total of 6 buildings in the spring and 7 in the fall. The buildings evaluated in each review are listed in the table below. For each evaluation, a representative sampling of facilities will be selected for review. Consequently, not all facilities will have a score for each evaluation.

A breakdown of the ratings for the buildings that were evaluated follows: % of responses greater than or equal to 7

	Calavera			Stagecoach	0:1	0.5.	Fire	Fire	Fire	Harding		0.1	2.6	34 0	0 11
Eval.		Dove		Comm.	-	Safety		Station	Station	Comm.	Carrillo		Magee		Overall
Date:	Center	Library	Faraday	Center	Hall	Center	#1	#2	#5	Center	Ranch	Library	House	Operations	Rating
Oct.															
10,															
2003	98%	85%		87%	92%			78%							89%
May															
5,															
2004	98%	99%	100%	96%	100%			92%							98%
Nov.															
18,															
2004	86%		100%	98%	97%							95%	98%	95%	96%
May															
26,							100%								
2005	93%	-	97%	96%	98%				-			92%	100%	95%	96%
Oct.															
20,															
2005	86%	98%		100%	93%	98%			96%	93%	90%	95%			94%

#### **ACTION PLAN**

- Continue to examine workload to determine what blend of contract and City staff should be used.
- Continue to analyze current contract inspection practices to ensure contract work meets standards.
- Analyze specific comments received during evaluation process and implement any Capital Improvement Projects during the 06-07-budget process. An area to consider is the interior of Calavera Community Center.

#### POINT OF CONTACT

Thomas Moore, Facilities and Streets Superintendent (760) 434-2939, <a href="mailto:Tmoor@ci.carlsbad.ca.us">Tmoor@ci.carlsbad.ca.us</a>.

#### Public Works

#### FACILITIES MAINTENANCE COST

#### THE OUTCOME

Facility cost efficiency.

#### THE MEASUREMENT

Maintenance cost per square foot of building space. Building space is defined as City-owned facilities that the City is obligated to maintain (utilized by city staff or leased to private and/or non-profit organizations). This measurement excludes capital expenditures.

#### WHAT THE DATA MEANS

This measure demonstrates the efficient use of funds allocated to facilities maintenance, and shows how resources are being used to achieve objectives.

#### **DEPARTMENT INVOLVED**

General Services/Facilities Maintenance.

#### **BENCHMARK**

Maintenance cost per square foot will be consistent with the national mean as reported by the International Facilities Management Association (IFMA). The IFMA survey is not completed on a yearly basis; the benchmark will be adjusted by the San Diego Consumer Price Index (CPI) on alternating years (3.3% in 2005).

#### **RESULTS**

Fiscal Year	Expenditures	Total Maintained Square Feet	Cost per Square Foot	Benchmark
2003	\$2,286,155	410,649	\$5.57	\$6.57
2004	\$2,687,338	419,424	\$6.41	\$6.39
2005	\$2,910,799	419,424	\$6.94	\$6.601

1IFMA standards, revised benchmark multiplied by CPI of 3.3%

#### ANALYSIS

The 2004 IFMA report included the results of 440 returned surveys from IFMA professional members in the U.S. and Canada. The IFMA benchmarking report is completed only every second year so for this year's comparison the 2004 figure was multiplied by the San Diego CPI of 3.3% to create the benchmark number. The IFMA standard for cost per square foot is based on custodial, utility and maintenance costs of a facility. Based on the collected data, the

City is \$0.34 above the national mean. It should be noted that the IFMA figures are a national average and do not take into account the variations in costs between regions of the country. For example the March 2005 Civil Works construction Cost Index System report mentions that California has a weighting factor for costs of 1.19 above the national average. If this factor were applied to the IFMA figure of \$6.60 it would result in a figure of \$7.85 per square foot.

Overall there was an increase in expenditures of \$223,461 in the most recent fiscal year. 38% of the increase is attributable to an increase in the City employee benefit rate and 62% to an increase in contracted services costs. The contract service cost increase can be attributed to the increased cost of materials and labor in the booming southern California construction industry as well as a large increase to Heating and Air conditioner repairs required to keep some of these aging systems operating.

The City owns approximately 54 buildings and is involved in managing and maintaining these facilities. Some of these facilities were not calculated in the total square footage because the City does not use these sites to conduct City business to any large degree. Of note, buildings such as Farmers Insurance Building, Helen Allman Girls Club and the Senior Center Annex (formally CUSD) require staff and contractor time to remain operational which create costs that register against the expenditure portion of the measure but due to the minimal City usage of these spaces the square footage has not been included with the total square footage in the above calculations.

# **ACTION PLAN**

- Continue to learn which tasks can best be contracted out and which should remain the function of City staff.
- Investigate the work being provided by contract staff and determine what level of inspection would ensure quality work is being provided.
- Seek out energy efficient solutions to building maintenance needs that can heat, light and cool the facilities more efficiently. Use incentive and rebate programs where available to install energy efficient systems.
- Replace some of the City's high maintenance HVAC systems such as at the Cole library.
- Investigate the use of a Regional weighting for cost measurement comparison.

#### POINT OF CONTACT

Thomas Moore, Facilities and Streets Supervisor (760) 434-2939, Tmoor@ci.carlsbd.ca.us.

#### Public Works

#### FACILITIES CUSTOMER SERVICE AND SATISFACTION

#### THE OUTCOME

Buildings/offices that are safe, attractive and comfortable allowing employees to conduct City business and provide services to the Community.

#### THE MEASUREMENT

This measure uses a multi-modal approach combining:

**Internal Customer Service Survey:** Survey results to questions in an annual survey of City employees that asks, "Using a scale of 1 to 5, where 1 means very poor and 5 means Excellent, how would you rate your level of satisfaction with Facilities Maintenance performance?"

**Work Order Response Time:** The length of time it takes to complete work orders.

#### WHAT THE DATA MEANS

**Internal Customer Service Survey:** This measure is an indication of how well expectations are met while providing services to ensure buildings/offices are a safe and comfortable place to work.

**Work Order Response Time:** This measure is an indication of how quickly staff can respond to work orders ensuring the safety, attractiveness, and comfort of the workspace.

- *Emergency* work orders eliminate hazards, unsanitary conditions and reduce liabilities (e.g. broken plumbing or electrical, trip hazards, etc.).
- *High Priority* work orders are repairs and alterations so the City can conduct its business and provide services to the community (e.g. audio visual equipment, furniture and HVAC repairs).
- *Medium Priority* work orders are requests and/or repairs for scheduled activities that do not impede staff's ability to effectively perform his/her duties (e.g. hanging pictures on the wall, moving surplus, replacing doorstops, etc.).
- Low Priority work orders are requests and/or repairs to improve the working environment of City staff (e.g. painting an office, changing furniture styles, etc).

#### DEPARTMENT INVOLVED

General Services/Facilities Maintenance.

#### **BENCHMARK**

*Internal Customer Service Survey*: 90% of internal surveys returned indicate the overall quality of service by Facilities Maintenance at Good or Excellent.

# Work Order Response Time:

- 90% of Emergency work orders completed within 24 hours.
- 90% of High Priority work orders completed within 72 hours.
- 90% of Medium Priority work orders completed within 20 days.
- 90% of Low Priority work orders completed within 30 days

#### **RESULTS**

# Internal Customer Service Survey - Overall quality of service

BENCHMARK	2002	2003	2004	2005
90%	81%	83%	95%	89%

Facilities Maintenance % Good or Excellent	2002	2003	2004	2005
Timeliness of service	67%	63%	83%	80%
Courtesy of staff	96%	96%	98%	100%
Competence of staff	93%	86%	94%	98%
Completeness of service	80%	81%	86%	89%
Helpfulness of staff	92%	92%	94%	96%

# Work Order Response Time:

YEAR	BENCHMARK	EMERGENCY	HIGH PRIORITY	MEDIUM PRIORITY	LOW PRIORITY
2001-02	90%	97%	97%	84%	82%
2002-03	90%	97%	98%	92%	74%
2003-04	90%	97%	93%	95%	88%
2004-05	90%	96%	93%	96%	94%

#### **ANALYSIS**

Internal Customer Service Survey: The Facilities department received an overall quality of service rating of 89% this year. This rating was very close to the benchmark of 90% but a drop of six percentage points from the previous year. This rating will be closely monitored in next year's survey to ensure that the overall satisfaction rating remains at the current level or higher. Courtesy of staff continued to be a department strength with a 100% rating being received this year. Timeliness of service continued to be the lowest rated service attribute in the survey with a rating of 80% this year however this is an overall increase over the 2002 and 2003 years for this measure.

The Facilities survey was sent to the entire 690 City full-time staff members this year compared to 2004 when only 270 surveys were distributed to targeted City staff. Sixty-five (9%) of surveyed employees returned their completed survey in 2005, which is down from a 33% response rate in 2004. This drop in response rate can be contributed in part from the shorten time line for returning the survey forms this year as well as the fact that the surveys were sent to all City staff this year.

Total Work Orders and Percentage Completed:

	2	2003		2004		005
PRIORITY	Work Orders	Percent Complete	Work Orders	Percent Complete	Work Orders	Percent Complete
Emergency	42	97%	39	97%	25	96%
High	307	98%	247	93%	286	93%
Medium	482	92%	382	95%	303	96%
Low	290	74%	263	88%	240	94%
Total	1,121		931		854	

For the third year in a row, emergency-, high- and medium-priority work orders achieved benchmark with low priority work orders also exceeding the benchmark for the first time this year. Low priority work order completion within target has increased from 74% in 2003 to 94% in 2005. Overall there is a decrease in the total number of work orders opened from 1,121 in 2003 to 854 in 2005. While the decrease is most likely attributable to several factors, there were several large projects that took a considerable amount of time last year including the City Council chamber remodel, the Stagecoach lobby remodel and various jobs resulting from the winter storms. Additionally, small "add-on" jobs that are created by a request that occurs while a technician is completing another request are not necessarily captured, and this might have been heightened by the immediacy of dealing with requests related to last winter's storms.

# **ACTION PLAN**

- Investigate the use of handheld Mainstar work order devices to allow staff to enter and close work orders from the field. This would assist in ensuring that jobs are always tracked on the system in the form of a work order.
- Need to identify additional resources to assist facility staff to complete all requests in a timely manner. This will likely come in the form of contracted services.
- Actively working to create a web based version of the survey so that staff
  can complete it online next year. It is expected that this easy-to-complete
  format would encourage a larger response rate and simplify compilation of
  the results.

• As the department is under new management, the new Superintendent and Supervisor will review current processes to ensure adequate tracking and reporting is conducted.

# POINT OF CONTACT

Thomas Moore, Facilities and Streets Superintendent (760) 434-2939, Tmoor@ci.carlsbad.ca.us.

#### Public Works

# FLEET AVAILABILITY, COST & CUSTOMER SATISFACTION

#### THE OUTCOME

A fiscally responsible fleet maintenance program with highly satisfied customers and high levels of fleet availability.

#### RESULTS

MEASURE	BENCHMARK	RESULTS
Customer Satisfaction	90%	88%
Fleet Availability	90% maintenance	75%
	95% availability	98%
Maintenance Costs	Costs equal to or lower than National estimates	5 classes lower or equal to national benchmarks
		2 classes slightly higher than national benchmarks <sup>1</sup>
		2 classes benchmark to be determined.

#### **ANALYSIS**

Costs for Carlsbad's fleet maintenance program are in-line with national standards. The availability of the fleet is strong. Turnaround times for scheduled maintenance continue to be a challenge, and customer satisfaction while relatively strong, slipped just below benchmark levels.

The vehicle liaison program was implemented this year, with the intent of improving timeliness of preventative maintenance and increasing overall customer satisfaction. The concept of the vehicle liaison program is to have a few specific individuals from each MSA, or major customer groups as contacts for Fleet. These individuals receive maintenance updates and messages from fleet, and communicate their divisions' needs to fleet. The liaison program was implemented in the final quarter of the fiscal year, so the full impact of this program is not reflected in the survey results. Additionally, staff continued to make efforts to notify employees via e-mail or by phone on the status of their vehicle. It is largely believed that communication is the most important component in achieving customer satisfaction. The percentage of customers who rated overall satisfaction as "Good" or "Excellent" dipped just below the

<sup>&</sup>lt;sup>1</sup> These classes are Light Truck Police and Police Motorcycle. ICMA standards combine these classes with Police Sedan, whereas the City considers them separately.

benchmark of 90%, at 88%. Survey response rates continued to be low, at 26% (28 of 109 surveys returned). With low response rates, any individual survey would have a more significant impact on the overall results.

This was certainly the case this year as survey results were generally favorable although a couple of respondents did relay concerns and their scores were reflected in the decreased results for this year. To address continuing low response rates, the Public Works Performance Measurement team is working to create a web-based survey for next fiscal year, with the hope of simplifying the customer service measurement process and providing more timely feedback.

24-hour turnaround of scheduled preventative maintenance continues to be a challenge. For the last three years, results have consistently been in the range of 70% to 78%. The department liaison program was created with the hope that improved communication would improve timeliness of vehicles being brought in for scheduled maintenance so that vehicles are serviced when there is adequate staffing available to complete the work on time. Implementation of the program occurred too late in the year to really have an impact in fiscal year 2005 results. However, staff is optimistic that it will have a positive impact in the coming year as a review of the 2005 data shows that many of the vehicles that did not meet the 24-hour turnaround are clustered around the same day which is indicative of vehicles brought in outside of their regular schedule.

Vehicle drop-off time has impacted this measure. Of note, only 60% of the vehicles logged in during the afternoon were completed under 24-hours, and no vehicles logged in on Friday afternoon were completed within 24-hours. Afternoon drop-offs are generally a convenience for the customer; but, while it represents good customer service, it does decrease the ability of staff to get that vehicle back within the 24-hour target timeframe. Although adjustments to allowable drop-off times may improve the results for this particular measure, they would have a negative impact on customer service and potentially the overall quality of the service provided.

With a full-year of the department liaison program in place, we expect turnaround rates to improve. However, missed appointments, and late drop-off times will continue to limit staff's ability to meet the 90% benchmark in this category.

Once again we exceeded the benchmark for vehicles available for use (95%) reaching a 98% fleet availability rating.

This year is the second full year in which the new Computerized Maintenance Management System (CMMS) reports were available. The cost data includes labor, parts, outside repairs, fuel, and oil. This data represents the cost per mile over the life of the vehicle from the inception of the CMMS. A significant change for this year is the introduction of new categories of vehicles, including

breaking out police vehicles and fire apparatus. This is a more accurate snapshot of the various vehicle classes in the City's fleet. Maintenance costs should therefore be more accurately reflected. The chart below shows comparisons of costs of the various categories in the City's fleet:

	Benchmark National	CPM End of	СРМ	СРМ
Vehicle Class	Estimates	2003*	End of 2004	End of FY 2005
Sedan	\$0.17-\$0.31	\$0.16	\$0.28	\$0.19
Police Sedan**	\$0.23			\$0.19
Light Truck	\$0.23-\$0.41	\$0.22***	\$0.31***	\$0.32
Light Truck Police**	\$0.23	N/A	N/A	\$0.37
Medium Truck	TBD	\$0.22***	\$0.35***	\$0.58
Heavy Truck	TBD	\$1.65	\$0.80	\$2.79
MICU**	\$0.66	N/A	N/A	\$0.41
Fire Apparatus**	\$2.30			\$1.98
Police Motorcycles**	\$0.23	N/A	N/A	\$0.38
Avg. Cost for Fleet+				\$0.63

<sup>\*</sup> Only 7 months of data available.

In an effort to determine if national standards existed, we were able to find comparisons for several of our vehicle classes. Two primary sources of data were used for comparison: Fleet Central, publisher of Government Fleet magazine, and ICMA. Fleet Central provides a lifetime cost analyzer for several models of sedans and light and medium duty trucks. ICMA provides data for classes including Police Vehicles, EMS vehicles (ambulances) and Fire Apparatus. Sedan costs for Carlsbad totaled \$0.19 per mile; Fleet Central provides costs for compact and intermediate sedans that are model specific and range from \$0.17 to \$.31/mile. For light trucks, the cost range is \$0.23 to \$0.41/mile. This category includes compact and larger pick-up trucks, minivans, SUVs and full-size vans, which accounts for the broad range of costs. The City's average cost for this category is \$0.32/mile. Some data was garnered from ICMA's survey of local jurisdictions, and is included here. Where ICMA data was used, the cost comparison does not include fuel costs, in order to provide amore accurate comparison. There are some drawbacks to using ICMA data. First, ICMA includes Motorcycles and SUVs in the Police Vehicle category, whereas the City separates these categories. Second, ICMA does not include fuel costs in their analysis, while Carlsbad does. However, as the chart illustrates, Carlsbad is generally within the range of expected costs for most vehicle classes.

<sup>\*\*</sup>These classes either were not reported or were combined with other classes prior to 2005.

<sup>\*\*\*</sup>Combination of classes in prior years' reports. These specific classes as currently defined are new for 2005.

<sup>+</sup>Includes fuel for all classes of vehicles

# **Customer Satisfaction**

- Continue department liaison program.
- Work on Internet survey for post-service follow-up with customers.

# Preventive Maintenance Work Orders Completed in 24 hours:

• Analyze impacts of the department liaison program after a full-year of implementation.

# Units Available for Use:

• Continue tracking results and monitoring to ensure we remain above the established benchmark.

#### Maintenance Costs

• Find suitable benchmark data for those classes that do not currently have a benchmark.

# POINT OF CONTACT

Gary Jenner, Public Works Supervisor, (760) 931-2192, gjenn@ci.carlsbad.ca.us

#### Administrative Services

#### **HUMAN RESOURCES - INJURED EMPLOYEE TIME OFF**

#### THE OUTCOME

Minimization of the amount of time that industrially injured employees are off work.

#### THE MEASUREMENT

Number of days between the dates an employee is injured on the job and the date that the employee returns to full or modified duty with the City.

#### WHAT THE DATA MEANS

Research shows that the greater the amount of time that an injured employee remains off work, the less likely he/she will return as a productive member of the workforce. In fiscal year 2004-2005 the City spent over 2 million dollars on workers' compensation insurance and claims, and that figure does not even include the fiscal impact of lost productivity. By reducing the number of days that an employee is out of the workplace, the City can reduce workers' compensation expenditures; ensure adequate staffing levels for City departments and enhance the connection between the injured employee and the City.

This measure is used to analyze trends, identify high-risk work groups and as an efficiency comparison to other agencies. This data is tracked and posted at sites throughout the City per Cal OSHA requirements. This measure is part of Human Resources Total Disability Management Program.

#### DEPARTMENTS INVOLVED

Human Resources, all City departments.

#### BENCHMARK

An average of 4.2 days or less lost per claim. This benchmark is based on the ICMA average for agencies with less than 100,000 populations, and will be reviewed annually.

#### RESULTS

	FY 2002/2003	FY 2003/2004	FY 2004/2005
Benchmark-ICMA	6.0	4.8	4.2
Carlsbad	7.5	10.8	41.4

#### **ANALYSIS**

This measure can be used as an indicator of the success of an agency's disability management program. The data shows that Carlsbad's average number of days lost per claim is 37 days more than the average for cities under 100,000 reporting to ICMA. Our average radically increased by 30 plus days over the last two years, while the ICMA average decreased. Based upon our analysis, Police Department employees were responsible for over 60% of Carlsbad's lost working days in this reporting period, with 628 lost days. The Police Department had a total of 16 claims this reporting period. Of those 16, the 6 largest claims account for 87% of the Police Departments lost days. Back injuries are responsible for 5 of the 6 largest claims.

Last year, Fire Department employees were responsible for over 40% of Carlsbad's lost working days with a total of 371 lost days. They improved significantly this year with a total of 193 lost days. Police and Fire employees together were responsible for 79% of the lost days in this reporting period.

For both Police and Fire, the large number of lost working days is partially attributed to the provisions of Labor Code Section 4850, which entitles Safety personnel who are totally temporarily disabled and not at work, full salary up to one year. This "benefit" often works as a disincentive for employees to return to work.

Public Works also had fewer lost days of work compared to last year. They went from 241 lost days of work last reporting period, to 173 lost days this year. Public Works recently implemented a new-hire policy requiring pre-employment physicals for all new part-time employees. This may have contributed to the improved numbers.

#### **ACTION PLAN**

Human Resources has resumed the practice of distributing workers' compensation loss data to the Leadership Team and other managers in the City. The Police Department has recently instituted a formal monthly workers' compensation claim review process. We will work to establish a more formal, scheduled process to share this data with all city departments to ensure this cost center receives attention.

In fiscal year 2004-2005 there was a management goal surrounding workers' compensation issues. As an outcome of the goal, the team created an injury management toolbox that includes a list of preventative action and cost mitigation process. The toolbox was shared with all levels of the organization. Human Resources have commenced a focused wellness strategy targeting the aging workface in the Police Department. The program designed for the Police Department consists of baseline medical testing, safety and wellness training directed toward supervisory and line staff, and the development of fitness plans for individual employees.

Early in 2006, we will bring on-site, a mobile medical screening, which will provide wellness screenings to all City employees. Senate Bill 899/Workers' Compensation Reform will play a significant role in reducing workers' compensation costs. Some of the key elements of the reforms are:

- Management of medical treatment/Developed a Medical Provider Network (MPN)
- Reduction in permanent disability for return to work
- Apportionment of permanent disability for prior injuries

City staff is actively pursuing workers' compensation claim closure by attending workers' compensation hearings and depositions, delaying claims, utilizing sub-rosa or surveillance, and maintaining high visibility on every claim. In addition, staff will work towards integrating and maximizing the efforts of accident prevention and claims management.

The City will continue to monitor this data and encourage the implementation of programs to reduce the number of days an employee is out of the workplace.

#### POINT OF CONTACT

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#### Administrative Services-

#### **HUMAN RESOURCES - EMPLOYEE TURNOVER RATE**

#### THE OUTCOME

Minimization of costs to the organization that result from employee turnover.

#### THE MEASUREMENT

The number of full-time, permanent employees who left the organization during the reporting period, divided by the total number of employees.

#### DEPARTMENTS INVOLVED

Human Resources, all City departments

#### **BENCHMARK**

A turnover rate of less than 5.8%. This benchmark is based on the average turnover rate for agencies with population under 100,000 reporting to ICMA for fiscal year 2004/2005, and will be reviewed annually.

#### RESULTS

Reason for Separation from Organization	FY 01/02	FY 02/03	FY 03/04	FY 04/05
Resignations	16	23	27	23
Retirement	8	9	10	27
Retirement Disability	0	3	0	1
Retirement Industrial	1	5	3	3
Terminations	3	2	0	1
Termination during probation	4	3	6	2
Deceased	0	0	1	0
Total	32	45	47	57
*Total for ICMA Benchmarking	19	25	27	23
Carlsbad gross turnover rate		7.0%	7.5%	8.9%
*Carlsbad ICMA comparable turnover rate	3.2%	3.9%	4.3%	3.6%
Average Turnover rate for ICMA agencies with under 100,000 population		9.8%	6.1%	5.8%

<sup>\*</sup>The ICMA turnover figure includes only resignations and non-probationary terminations.

#### **ANALYSIS**

This measure is an indicator of the effectiveness of employee recruiting and selection, quality of the organizational environment, effectiveness of the employer's wage and benefit structure, and age demographics of an organization's employees.

The turnover rate for the City of Carlsbad is about two percentage points less than the ICMA average. There were a total of 23 resignations in this reporting period. There were 9 resignations in the Public Works MSA, 4 of which are positions in the Management Analyst series. The Community Services MSA has the second largest number of resignations, with 5. There were only 2 resignations in the Police Department, down from 10 the previous fiscal year.

The majority of Carlsbad turnover was due to retirements. There were 31 retirements in this reporting period. Last fiscal year there were only 13 retirements. The retirements were spread throughout the City. Public Works and Public Safety had the highest numbers at 8 each. The retirement figures do not impact the benchmark number we compare against from the ICMA survey, as ICMA only counts resignations and non-probationary terminations in their figures. However, retirements have a considerable impact on the organization and this data is important to consider and forecast.

#### **ACTION PLAN**

Human Resources will continue the exit interview program for all resignations. The data collected in these interviews provides information that is often valuable to our client departments and gives us information on our competitiveness in the salary market. Human Resources will be more proactive in sharing turnover data with our clients in the coming year, as the large amount of retirements and anticipated retirements are making staffing a significant organizational issue.

The Human Resources staff continues to work with departments to ensure that the right employees are performing the right jobs, and that employees are held accountable. A turnover rate of up to 8% is considered "healthy", and may in fact prove to be beneficial in enhancing accountability in the organization.

#### POINT OF CONTACT

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# **Administrative Services**

# **HUMAN RESOURCES COST EFFICIENCY**

#### THE OUTCOME

Provide Human Resources services in a cost effective manner.

#### THE MEASUREMENT

Human Resources annual operating expenditures per number of full-time employees.

#### WHAT THE DATA MEANS

The goals of the Human Resources Department are to build people capability, build employee commitment and alignment, and build organizational capacity. This cost efficiency measure can monitor the fiscally responsible use of funds allocated to Human Resources to provide the services stated in our mission.

#### DEPARTMENTS INVOLVED

Human Resources.

#### **BENCHMARK**

Human Resources centralized expenditures as defined by ICMA Center for Performance Measurement. Figures include all HR staff salaries and benefits, all supplies, materials and direct costs. The figures do not include facilities costs, information technology costs, or worker's compensation. The benchmark agencies selected are California cities reporting to ICMA with HR Departments that provide similar services and serve similar size populations.

#### RESULTS

Benchmark	Population	# FTE's	HR Expenditures	Expenditure/FTE
Redwood City	75,402	511	\$1,243,424	\$2,433
San Mateo	93,100	553	\$630,600	\$1,140
Carlsbad	94,400	794	1,242,650	\$1,565

#### **ANALYSIS**

The Human Resources operating expenditures per full-time employee fall between the expenditures of the two agencies identified. As a result of significant budget reductions and lay-offs, the numbers reported by San Mateo are considerably lower than in the previous reporting period and Redwood City is reporting fewer FTE's. The operating expenditure figure includes: salaries & benefits of HR staff and all direct costs such as supplies, materials, and

professional services. The operating expenditure figure does not include salaries and benefits for employees or citywide training expenses.

# **ACTION PLAN**

The Human Resources Department will continue to analyze expenditures and compare them with other high-performing agencies. The Department will identify individual HR services for benchmarking, such as Recruitment Advertising, as more specific measures may prove to be more useful.

# POINT OF CONTACT

Rebecca Melillo, Management Analyst (760) 602-2442, Rmeli@ci.carlsbad.ca.us.

#### Administrative Services

#### **NETWORK OPERABILITY**

#### THE OUTCOME

A functional operating information technology network.

#### THE MEASUREMENT

Amount of time required for users to return to operational status. Problems are divided into two categories.

# Priority 1

- Total work stoppage on a critical system or operation
- Server down: affects whole site
- Core system down: Permits plus, IFAS, OPAC for Public Access, SIRSI, RFA, etc.
- City-wide Internet access down
- Telephones: remote site loses access no voice and/or data
- Critical failures of technology services regularly provided to the public at City facilities

# Priority 2

- Serious or potentially critical work slowdowns
- Printer issues can't print and no alternate print source is available
- Hardware failure monitor/keyboard/etc.
- Public terminal with Internet access

While not falling under the network operability performance measure, priority 3 and priority 4 calls are defined as follows and are included in the total tickets figure in the table below.

#### Priority 3

• Slight interruptions in work flow, affecting one user

#### Priority 4

 Minimal interruptions in workflow and/or waiting action by others for completion

# WHAT THE DATA MEANS

The measure is an indication of staffing levels, staff knowledge, and staff initiative to ensure that calls are resolved and completed in both a timely and effective manner.

#### **DEPARTMENTS INVOLVED**

Information Technology.

#### **BENCHMARK**

- 90% of all priority 1 service calls resolved in 60 minutes
- 90% of all priority 2 service calls resolved in 180 minutes

#### **RESULTS**

	Benchmark	2001	2002	2003	2004	2005
Priority 1	90%	85%	80%	84%	85%	88%
Priority 2	90%	95%	98%	98%	97%	97%

#### ANALYSIS

Analysis of the call volume by priority showed the following results:

Calls	2001	2002	2003	2004	2005
Priority 1	107	245	236	27*	10
Priority 2	676	1249	1874	148*	85
Total Tickets all Priorities	6,676	6,423	5,361	5,432	4,962

Service Calls now broken out into four levels: Urgent (1), High (2), Medium (3) and Low (4). Prior years reflected three levels: High (1), Medium (2), Low (3).

The data collected tracks the elapsed time from when the service call was opened until the time the service call was resolved and the user returned to full operational status.

Technology often times brings simplicity to our lives here at the City, however that simplicity is very elaborate in its implementation and support. This truth can be seen in the call trends. We are seeing fewer, yet more complicated calls. While the Priority 1 benchmark was not met, the Information Technology Department for the second year running did increase its performance over the prior year.

#### **ACTION PLAN**

- Continue monitoring of Urgent and High level calls.
- Review the requests for service/tickets for possible trends, which might lead to a redesign, and new definition for priority levels.
- Find possible benchmarking agencies.

#### POINT OF CONTACT

Kerry Jezisek, Sr. Management Analyst (760) 602-2448, Kjezi@ci.carlsbad.ca.us.

# **Administrative Services**

#### INFORMATION TECHNOLOGY COST

#### THE OUTCOME

Provide Information Technology Services in a cost-effective manner.

#### THE MEASUREMENT

Information Technology annual operating expenditures per full-time employee.

#### WHAT THE DATA MEANS

This measure evaluates the cost per employee spent by the IT Department on technology. The total cost of services includes all maintenance and operation costs incurred by Central IT for such items as: IT staff salary professional services, hardware and software maintenance, travel and communication charges. It does not include capital asset depreciation.

#### BENCHMARK

Annual cost of providing IT services per full-time employee will not exceed \$7,555. This benchmark was established using data from the 2003 – 2004 baseline year (as calculated by itmWEB: Information Technology Spending Scorecard – IT Spending per Employee – All Industries) and has been adjusted each year by the San Diego Consumer Price Index (4.1% in 2004, 3.3% in 2005)

#### RESULTS

Fiscal Year	Expenditures	# Full Time Employees	IT Spending/ Employee	Benchmark
2003	\$3,064,329	794	\$3,859	\$6,918
2004	\$3,363,786	794	\$4,236	\$7,174
2005	\$3,685,175	807	\$4,566	\$7,411

Note: Each business is unique, and each may require resources significantly different from these figures. The intent of these benchmarks and metrics is for use as a "sanity check" against our current operation.

#### **ANALYSIS**

The metrics and benchmarks listed have been collected and summarized from sources considered to be reliable, and are recommended for use as a general reference for IT executives. Periodically revised, these statistics change as updated data becomes available. The City will reflect that changes with the benchmarking data tables.

The 2005 IT spending per employee, like prior years, is below the benchmark. Spending in IT has been 2.5 – 3.0 times more than the CPI for that year. Spending levels have increased primarily due to large technology implementation efforts including the CAD and Library Web Services projects.

# **ACTION PLAN**

This is the first year for this measure. In the upcoming year, Carlsbad IT Management will continue to perform industry research and leverage the relationships with partner IT organizations.

The Department will analyze the year over year increases in expenditures to determine cause and conduct a SWOT analysis in any areas of concern.

Another opportunity is to determine the best way to clarify, format and collect other cost data supporting additional meaningful comparisons. Incorporated into next year's measure are the results of this effort.

#### POINT OF CONTACT

Kerry Jezisek, Sr. Management Analyst (760) 602-2448, Kjezi@ci.carlsbad.ca.us

# Information Technology

#### INFORMATION TECHNOLOGY SERVICE AND SATISFACTION

#### THE OUTCOME

A high level of customer service satisfaction and a high level of customer confidence in Information Technology (IT) staff's skills, knowledge and abilities.

#### THE MEASUREMENT

Results of an anonymous citywide employee opinion survey.

#### WHAT THE DATA MEANS

The measure is an indication of customer satisfaction with the Information Technology service levels provided to City staff. The measure is also an indication of staff knowledge, efficiency and effectiveness.

#### **DEPARTMENTS INVOLVED**

Information Technology.

#### BENCHMARK

Customer satisfaction: 90% of customers rate Information Technology as "Good" or "Excellent" (3 or better on a 1-4 scale)

Customer Confidence: 80% of all service requests will be resolved in one on-site visit effort by IT staff

#### **RESULTS**

The following results were based on 535 surveys distributed via citywide email, 127 surveys completed, for a response percentage of 24%.

# Overall Customer Satisfaction with I.T. Services:

	Good or
Year	Excellent
Benchmark	<u>&gt;</u> 90%
2001 - 2002	96%
2002 - 2003	81%
2003 – 2004	89%
2004 – 2005	90%

Survey Results by I.T. Service Area	% respondents at Good or Excellent	
	2004-2005	
Telephone Services		
Quality of Service	99%	
Timeliness of Service	95%	
Overall Satisfaction	96%	
Network Services		
Quality of Service	95%	
Timeliness of Service	93%	
Overall Satisfaction	94%	
Application Services		
Quality of Service	91%	
Timeliness of Service	91%	
Overall Satisfaction	91%	
<b>Desktop Services</b>		
Quality of Service	92%	
Timeliness of Service	88%	
Overall Satisfaction	89%	
Help Desk Services		
Quality of Service	84%	
Timeliness of Service	81%	
Staff Knowledge	78%	
Overall Satisfaction	80%	

# **Customer Confidence:**

Benchmark	Year	Resolved in one on-site visit	
	2001 - 2002	92.9%	6,423
	2002 - 2003	92.1%	5,361
80%	2003 - 2004	78.3%	5,432
	2004 - 2005	82.9%	4,962

#### **ANALYSIS**

This year's survey reflects a slight, but none-the-less significant increase in customer satisfaction. The increase is slight – only 1%, but significant because the benchmark rating of 90% was achieved.

It is important to note that Information Technology is measuring not only our customer's level of satisfaction with the Information Technology Department, but also our customer's level of satisfaction with our outsourced help desk vendor. While the survey information is reviewed for overall satisfaction levels by IT management annually, it is the help desk services portion of the survey that comes under particular examination.

The help desk is the functional area of the department that interfaces with City staff over the phone, but is generally the first contact if City staff requires assistance with technology resources. It is the help desk that receives, records, services and routes all requests for service by City staff. This group handles approximately 5,000 customer requests annually. Because of its level of importance, should the help desk receive a low rating (below 90% good or excellent), the help desk vendor's service premiums are reduced. The reduction of payment premium remains in effect until the appropriate customer service rating is received (at least 90% good or excellent.)

It is in the category of help desk services that the highest percentage increases occurred. This increase is due primarily to two things: the vendor's increased familiarity with our technology environment and analysis of call solutions. When a call is resolved by the City of Carlsbad IT staff the solution is noted. The help desk reviews these tickets, reviews the solutions, trains their staff accordingly and then is able to offer a higher level of support to City staff. City staff is in-turn better pleased with the response and service they receive.

In order for IT staff to achieve the 80% in one visit confidence measure, work effort must occur at a high competency and effectiveness level. The customer confidence measure has the benchmark goal of resolving 80% of all IT service calls effectively, to the requestor's satisfaction, and requiring only one on-site effort or contact by the IT staff member. The benchmark was exceeded this year - 2.9 points over goal. Staffs continued work on developing a stable infrastructure has paid off. Also seen is an increase in the stability and up time of the City's core applications/systems. This measure will continue to be a meaningful challenge – one that will help the Information Technology Department provide a solid, high level of service.

#### **ACTION PLAN**

- Continue monitoring of results of the citywide opinion survey.
- Investigate methods for increasing help desk call resolution and satisfaction rate.
- Develop a better methodology for tracking customer confidence 80% of all tickets resolved in one on-site visit by IT staff.

#### POINT OF CONTACT

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# Citywide

#### CITY ADMINISTRATIVE FACILITIES

#### THE OUTCOME

Provide Top Quality Services.

#### THE MEASUREMENT

Administrative Facility Square Footage per 1000 population.

#### WHAT THE DATA MEAN

The standard of 1500 square feet per 1000 population is mandated per the Citywide Facilities and Improvement Management Plan.

#### **DEPARTMENTS INVOLVED**

Citywide.

#### **BENCHMARK**

1500 square feet of administrative facilities per 1000 city population.

#### RESULTS

Based upon a current population of 95,150, the City is required to have at least 142,725 square feet of administrative office space. We will be required to have approximately 180,000 square feet at build-out.

At the current time, the city has approximately 165,500 square feet of administrative facilities. This includes:

- Faraday Center 68,000 sq. ft
- Public Safety Center 64,000 sq. ft
- City Hall 13,000 sq. ft
- Facility and Maintenance (Water Department) 13,000 sq. ft
- Oak Ave. 5500 sq. ft
- Redevelopment 2000 sq. ft

The City also owns the 300,000 sq. ft. Farmers Building which may be used as a City Hall in the future.

#### **ANALYSIS**

The city currently meets this growth management requirement. With the acquisition of the Farmers Insurance Building, the City is not required per the growth management standard to acquire any additional administrative space. The City has acquired the second story of the Senior Center for possible use as

office space, and when renovations are complete, will be included in the City's inventory for Growth Management purposes.

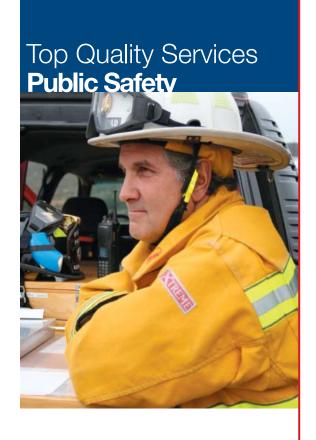
# **ACTION PLAN**

Continue to monitor the increase in population growth in context of one required.

# POINT OF CONTACT

Joe Garuba (760)434-2820, <u>Jgaru@ci.carlsbad.ca.us</u>.





Be a city that provides exceptional service on a daily basis



# **Public Safety Indicators**

- Fire Regional Study
- Emergency Medical Services Compliance Tracking
- Fire Special Operations
- Technology Enhancement
- CEMAT
- Joint First Responders Training Facility
- Future Policing Methods
- Police Process Improvements
- Emergency Operating Procedures
- Fire Emergency Operations Facilities Report
- Tow Contracts

# **Management Goals**

- Building Inspection Services
- Building Inspection Cost
- Building Inspection Customer Satisfaction
- Fire Response Time
- Fire Operating Cost
- Fire Customer Service and Satisfaction
- Fire Stations Growth Management Standard
- Fire Emergency Medical Services
  Response Time
- Fire Prevention Inspections
- Fire Prevention Development Process
- Police Response Time
- Police Cases Cleared
- Community Perception of Crime
- Police Operating Cost
- Police Customer Service & Satisfaction





# **Building Department**

The measures used to evaluate building inspection services are: the next day inspection rate, inspections per day per inspector, and the ratio of corrections. These three measures are used to evaluate consistent service delivery and were all within or close to accepted industry benchmarks.

Staff has the benefit of additional staff with an increase of productivity that has allowed it to handle a 36% increase in the number of approved inspections while experiencing only a 13% increase in expenses. The customer satisfaction survey showed that 100% respondents found the service to be excellent or good. The number of respondents was low, and staff is working on adjusting the survey mechanism.



# Why is it important to Carlsbad?

The overall quality of life in Carlsbad depends to a large degree on community safety and resident's perceptions of safety. The citizens of Carlsbad have high expectations for the safety of persons and property. The City has made a conscious choice to have a responsive and responsible Public Safety element in the General Plan and as an operational priority. Proactive, service-oriented, Police, Fire and Building Department services enhance the safety of the people who work, live, and play in Carlsbad. This adds value to the everyday quality of life for everyone in the City of Carlsbad.



# **Police**

Police response times reflects quality of service, and are influenced by a number of factors, like traffic circulation, staffing, and overall activity levels. The police department average response time for priority 1 calls is slightly longer at 6.8 minutes versus the 6 minute benchmark, while the times for priority 2 and 3 calls remain faster than the benchmark. This year is the first year of new CAD data, and the new data is being used to establish baseline measurement.

The overall positive perception of the police department is demonstrated in a number of measures. The crime clearance rate reflects a combination of investigative functions and performance of patrol and police records functions. This year Carlsbad ranks first in San Diego County for overall crime clearance rate, number two for violent crimes and number one for property crimes. A citizen's sense of safety in the community is dependent on a variety of factors with perception of police responsiveness being a key factor. The department has been close to or above the benchmark when citizens were asked whether they felt safe walking in there neighborhood. The final measure is the customer survey which met benchmark and supports the findings of the other measures.

The police department operating costs were slightly above benchmark at \$197 per capita. The increases resulted from a 16% increase in salary and benefits and operating costs associated with the public safety technology program.

# Fire

Fire Department Response Time for First Unit on Scene				
BENCHMARK Fiscal Year Carlsbad				
90%	2003-04	87%		
90% 2004-05 86%				

One of the critical factors in achieving a positive outcome in an emergency that threatens life, property, or the environment is providing emergency services as quickly as possible. Two fire department measures evaluate the critical component of response time. The first is the benchmark of eight (8) minutes for first unit on scene for all call types. This year it was slightly below benchmark at 86%. A new measure has been introduced this year focusing on Emergency Medical Services (EMS) calls for service. Two times are included in the measure capturing both the first unit with a benchmark of five (5) minutes and second unit with a benchmark of eight (8) minutes. The benchmark is based on industry standards for service delivery, specific to EMS calls.

Fire Department Customer Service Percent Reporting Good or Excellent					
2002-03 2003-04 2004-05					
BENCHMARK	≥ 95%	≥ 95%	≥ 95%		
911 Dispatch	97%	98%	97%		
Response Time	99%	98%	97%		
Competence	100%	99%	98%		
Courtesy	99%	100%	99%		
Transportation	96%	100%	97%		

The fire department annually conducts a customer service and satisfaction survey with emergency medical service recipients because those calls represent approximately 72% of all fire department calls for service. The survey results continue to validate the high level of customer satisfaction seen in previous years, with the vast majority of customers highly satisfied with a 98% average among the service areas evaluated.



Fire Department Cost per Capita			
BENCHMARK	Fiscal Year	Carlsbad	
\$100	1999-00	\$ 90	
\$106	2000-01	\$101	
\$109	2001-02	\$101	
\$113	2002-03	\$105	
\$117	2003-04	\$108	
\$121	2004-05	\$119	

The fire department remains slightly below the benchmark for expenditures at \$119 cost per capita. The department will continue to monitor revenue sources to assist in remaining compliant with the cost benchmark. Additionally the Fire Department remains in compliance with the growth management plan, specific to the fire resource distribution throughout the community.



# Community Development

#### **BUILDING INSPECTION DELIVERY**

#### THE OUTCOME

A safely built community ensured by prompt and efficient professional building inspection services.

#### THE MEASUREMENT

This is a multi-modal approach combining:

- Next day inspection rate
- Inspections per day per inspector
- Ratio of corrections to inspection requests

#### WHAT THE DATA MEANS

- **Next Day Inspection Rate**: The department is achieving its service objective 95% of building inspection service requests is made the next working day.
- *Inspections per Day per Inspector*: There is adequate staffing to accommodate the number of inspection requests.
- Ratio of Corrections to Inspection Requests: Inspectors are detecting and correcting construction deficiencies at an effective rate.

Overall building code compliance is difficult to observe directly except with proxy indicators. When the following three statistical products are observed in sum, and the ratios are within acceptable industry standards, it's reasonable to deduce that an acceptable level of code compliance is being achieved.

The Department's service objective is to make 95% of all inspection requests the next working day. When inspections are made in a timely manner, projects move forward, and compliance with the approved plans and codes is generally more assured. Builders anticipating timely service are more likely to secure permits, voluntarily build in conformance with codes and standards, and schedule all required inspections.

The ratio of inspections per day per inspector is used to gauge the average day-to-day workload of an inspector. When an inspector is overwhelmed with inspection requests, their tendency is to move quickly through a series of inspections increasing the likelihood of missed code violations. The ratio of corrections detected to the actual inspection requests made is an indication of the inspectors' ability to detect construction deficiencies and cause them to be corrected. A decrease in this ratio is desired except when decrease is caused by an increase in daily workload.

#### **BENCHMARK**

- 95% of inspection requests will be made the next working day.
- Inspectors will average no more than 25 inspections per person per day.
- Corrections will be detected on average on at least 15% of inspections made.

#### **RESULTS**

Building Department Service	Benchmark	FY2002-03	FY2003-04	FY2004-05
Next Day Inspections	95%	95	96	95
Ave. Inspections per Day per Person	<25	18	21	25
% of Inspections Requiring Corrections	>15%	17%	16%	13%

#### ANALYSIS

The three measures indicate a consistent service delivery within or very close to accepted industry benchmarks. Demand for inspections rose about 20% (21 to 25 inspections per day). Consequently, corrections were noted on about 13% of inspections made – a 17% drop in corrections cited. Inspectors made about 96% of service requests the next working day and they are still carrying a workload within acceptable levels.

#### **ACTION PLAN**

Staffing has been added this fiscal year with the addition of two limited-term full time building inspectors and a part-time inspector. This should relieve the increase in the average inspections per day per person and increase the next day inspection rate. The first two months of FY 2005-06 show the rate of corrections back to 15%. Staff will continue to monitor indices monthly and watch for increasing workload combined with lowered corrections detected.

#### POINT OF CONTACT

Patrick Kelley, Building and Code Enforcement Manager (760) 602-2716 <a href="mailto:pkell@ci.carlsbad.ca.us">pkell@ci.carlsbad.ca.us</a>

# Community Development

#### **BUILDING INSPECTION COST**

#### THE OUTCOME

**Building Inspection Cost Efficiency** 

#### THE MEASUREMENT

Cost per approved inspection.

#### WHAT THE DATA MEANS

The outcome of the department is to have a safely built community. Timely, professional, and efficient building inspection service is an important component of the construction process. Permit fees are collected to provide this service and the efficient use of those fees contributes to the overall outcome of the department. Projects are inspected at regular intervals for compliance with the approved plans and adopted building codes. With each approval or partial approval a project may move into the next phase of construction. These approvals are what both the department and the builders desire. Efficient use of the fees collected for a professional service delivery system (delivering approved inspection results) is a highly desirable outcome.

#### **DEPARTMENTS INVOLVED**

Building

#### BENCHMARK

This is the third year of this measure and a benchmark has not yet been established. Staff will be seeking industry benchmarks that will require contacting other jurisdictions for their expenditures and results.

#### **RESULTS**

Building Department				
Service	Benchmark	FY2002-03	FY2003-04	FY2004-05
Approved or Partially				
Approved Inspections	TBD	24,278	23,986	32,859
Department				
Expenditures	TBD	\$1,410,000	\$1,304,000	\$1,476,000
Cost per Approved or				
Partial Approval	TBD	\$58.08	54.37	\$44.92

#### ANALYSIS

The third year of this measure yields results demonstrate an improved efficiency. The number of approved inspection was up 36% and expenses rose

only 13%. This improvement in the net cost per approved inspection can be attributed to two specific actions taken in the past year. Additional part-time staff was added specifically to work in production housing tracts, and the introductory packet with checklists for contractors has improved contractors' use of staff inspection time. Part-time staff added was an experienced inspector who requires very little supervision or management. Two limited-term positions were also filled.

#### **ACTION PLAN**

Staff implemented an introductory packet of information last year to provide valuable information to building permit clients. The packet includes the most typical items inspectors view as causing projects to be not ready for their inspection. A typical construction project is broken down into phases, and the typical "not ready" conditions inspectors find are detailed in writing so that builders can check off the most common reasons for failed inspection. There is also a great deal of other helpful customer service resource material in the introductory packet. Staff will develop other helpful checklists to add to the introductory packet to continue to improve the contractors' efficient use of staff resources. Staff will continue to monitor this trend and coach staff on techniques to economize the number of inspections needed to secure approved inspections. Staff will be seeking industry benchmarks that will require contacting other jurisdictions for their expenditures and results.

#### POINT OF CONTACT

Patrick Kelley, Building and Code Enforcement Manager (760) 602 2716 pkell@ci.carlsbad.ca.us

# Community Development

#### **BUILDING INSPECTION CUSTOMER SATISFACTION**

#### THE OUTCOME

A high level of building inspection customer satisfaction.

#### THE MEASUREMENT

This is a multi-modal approach combining:

- Results of a customer satisfaction survey sent to all building permit customers at the completion of their project
- Ratio of Approved or Partially Approved Inspections to Inspection Requests

#### WHAT THE DATA MEANS

The Building Department sends a mail-back survey to customers at the completion of their project. The self-selecting survey asks customers to rate the Front Counter Services (plan check) and Building Inspection Service on four-point scale (Excellent, Good, Fair, and Poor). The survey also asks for an overall ranking using the same scale.

The Building Department also tracks the number of approved or partially approved inspections and compares that to the number of inspection requests. Approved inspections are the customer's and the Department preferred expectation, and increasing this ratio is generally regarded as an indicator of a successful transaction.

#### **DEPARTMENTS INVOLVED**

Building.

#### **BENCHMARK**

90% of survey respondents rank all Building Department services as either excellent or good

75% of all inspections are either approved or partially approved.

#### RESULTS

Front counter, inspection scheduling, and field inspections survey results were:

	FY 2004	FY 2005
Front Counter	97%	94%
Inspection Scheduling	100%	93%
Field Inspections	98%	95%
Overall Service	100%	94%

# **Approved Inspections:**

Inspection Results	Benchmark	FY 2003 Results	FY 2004 Results	FY 2005 Results
Approved		54%	53%	55%
Partially Approved		6%	7%	7%
Combined Approved/ Partially Approved	75%	60%	61%	62%

#### **ANALYSIS**

This is the second year of results for this measure, and surveys were sent out for the entire year. Thirty-six (36) surveys were returned, which is a relatively low return rate. Although the good/excellent ratings dropped, the results received were still all above the 90% good/excellent benchmark. In the 32 surveys returned with 9 ratings each, 94% of the marks were good or excellent. Of the 20 fair or poor marks, 40% of those were for the timeliness of the plan review process; 60% were for the inspection process. This is roughly proportionate to the distribution of the work associated with the permitting and inspection process. Overall, the 94% good or excellent rating was well above the benchmark.

The rate of Approved, or Partially Approved inspection moved slightly higher than the two previous years. This is a positive trend given the 23% increase in service demand between 2004 and 2005.

#### **ACTION PLAN**

Customer Service portfolios are now sent out with every permit issued at the time the permit is issued. There is a self-addressed, postage-paid survey included in every portfolio. This will assist in ensuring a higher number of surveys returned next fiscal year. Daily coaching of field inspectors assures they continue to focus on positive customer contacts at every inspection and accommodating builders whenever they can without yielding on code requirements. A third-party consultant is also analyzing the department and its work processes. This process will reveal any processing or inspection service improvement opportunities. The department is establishing a "Permit by Appointment" process that will allow some types of permit applications to be reviewed and approved over the counter. It is anticipated this will raise customer satisfaction levels with the permitting process.

# POINT OF CONTACT

Patrick Kelley Building and Code Enforcement Manager (760) 602-2716, <a href="mailto:pkell@ci.carlsbad.ca.us">pkell@ci.carlsbad.ca.us</a>.

#### FIRE RESPONSE TIME

#### THE OUTCOME

Maximization of positive outcomes in a medical, fire, or rescue emergency.

#### THE MEASUREMENT

Fire Department response time in number of minutes from dispatch to arrival on scene.

#### WHAT THE DATA MEANS

One of the critical factors in achieving a positive outcome in an emergency that threatens life, property, or the environment is providing emergency services as quickly as possible. The Fire Department response time data represents all fire department responses in FY 2004-05 that threatened life, property or the environment, as well as other responses. Responses that were cancelled enroute are not included in this data set.

#### **DEPARTMENTS INVOLVED**

Fire.

#### **BENCHMARK**

First unit arrives on scene in eight minutes or less 90% of the time.

#### RESULTS

#### 8-Minute Response Time

Fiscal Year	Benchmark	Carlsbad
2003-04	90%	87%
2004-05	90%	88%

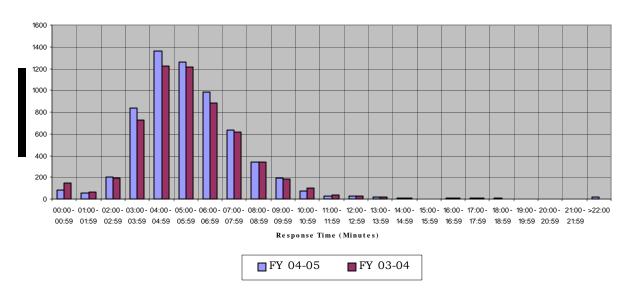
#### **ANALYSIS**

Until June 30, 2003, the City's Computer Aided Dispatch (CAD) system only had the capability of capturing travel time data, which is only one component of response time. Response time consists of: 1) dispatch; 2) personnel turnout time from dispatch to manned apparatus departure; and, 3) travel time to the scene. In FY 2003-04, the Fire Department began dispatch services with the North County Dispatch Joint Powers Authority (NCDJPA). The NCDJPA CAD system has created accessible response time data, which has been analyzed and is graphically presented on the following page. The FY 2003-04 data serves as the base year benchmark from which future fiscal year response time information can be analyzed and compared. The data represents the response

time components from dispatch to the first responding unit's arrival on scene. The shaded bars represent the benchmark response time data from FY 2003-04 and crosshatched bars represent the response time data from FY 2004-05.

The response time benchmark of eight minutes is based upon FY 2002-03 ICMA fire department data. The ICMA response time data includes receipt of the 911 call as a component of response time, while the NCDJPA data excludes receipt of the 911 call in response time computations.





Throughout the fiscal year, the Fire Department routinely analyzes overall response time data. The Fire Department has continuously monitored response times for all Fire Department Priority One calls for service from time of dispatch to the arrival of the first unit on scene with a benchmark of eight minutes. If these analyses reveal that response times are less than optimal, the department will identify the causes and develop, implement, and monitor new internal organizational practices to enhance response time and work with other City departments and outside agencies whose activities can affect and contribute to optimal response times. In FY 2004-05, the Fire Department identified potential internal organizational enhancements to include updating station-alerting technology, decreased personnel turnout time, capture response time data that includes receipt of the 911 call and continuing consolidation of resources for mandated training.

#### **ACTION PLAN:**

Throughout the fiscal year, the Fire Department routinely analyzes overall response time data. If these analyses reveal that response times are less than optimal, the department will identify the causes and develop, implement, and monitor new internal organizational practices to enhance response time and

work with other City departments and outside agencies whose activities can affect and contribute to optimal response times. In FY 2004-05, the Fire Department identified potential internal organizational enhancements to include capturing response time data that includes receipt of the 911 call and continuing consolidation of resources for mandated training.

From a response time optimization perspective, the Fire Department conducted research with NCDJPA to determine if response time data could be obtained that was inclusive of the time of receipt of the 911 call to dispatch. The Fire Department has concluded that for the Carlsbad Fire Department to capture this component of response time is currently cost prohibitive. The NCDJPA dispatch system enhancement required to accomplish this would be significant. Since this time component is relatively small and it is captured and routinely monitored by NCDJPA, the additional enhancements required to add this component to each agency's database is not warranted at this time.

The installation and organizational implementation of the Fire Agencies videoconferencing system, which links all fire stations and fire administrative offices in North County, continues to increase the Fire Department's ability to administer mandated training while keeping apparatus within their districts and available to respond to calls for service. In FY 2005-06, the Fire Department will continue to explore, expand and optimize the use of the videoconferencing system.

With the implementation of the EMS-related response standards, the Fire Department will be routinely monitoring the personnel turnout time, which is measured from the time of dispatch to manned apparatus departure. The Fire Department will be reviewing turnout time averages to identify trends and follow-up on extended turnout times, which generally occur when personnel are physically separated from their apparatus during certain training events and when performing administrative functions.

#### POINT OF CONTACT

#### FIRE OPERATING COST

#### THE OUTCOME

Efficient use and recovery of General Fund revenues.

#### THE MEASUREMENT

Net operating cost per capita for fire, rescue, emergency medical, and fire prevention services

#### WHAT THE DATA MEANS

The efficient use of financial resources allows the City to provide a higher level of service, additional public services, or reduced service costs to the taxpayer.

#### DEPARTMENT INVOLVED

Fire.

#### **BENCHMARK**

The net cost per capita should not exceed \$121 (using the 1999-00 as the base year and adjusting for inflation). The Consumer Price Index (CPI), as reported by the Bureau of Labor Statistics for San Diego County, for FY 2004-05 was 3.3%. Applying the CPI to the \$117.18 for FY 2003-04, the FY 2004-05 benchmark is \$121.05.

#### RESULTS

Based upon a current population of 95,146 the FY 2004-05 cost per capita to provide fire, rescue, and emergency medical and fire prevention services was \$119.

Benchmark	Fiscal Year	Carlsbad
\$100	1999-00	\$90
\$106	2000-01	\$101
\$109	2001-02	\$101
\$113	2002-03	\$105
\$117	2003-04	\$108
\$121	2004-05	\$119

Actual FY 2004-05 Fire Department Expenditures: \$12,840,574
Actual FY-2004-05 Fire Department Revenues \$1,534,095
Net Fire Department Cost \$11,306,479
Population 95,146
Cost Per Capita \$119

#### **ANALYSIS**

The Fire Department is operationally mandated to provide constant staffing, which requires the department to maintain a complement of 23 emergency operations personnel, 24 hours per day, 7 days per week. In order to maintain constant staffing, personnel must be hired back to cover any personnel absent due to sickness, vacation, injury, or mandated off-site training. Since personnel costs represent a majority of every Department budget, the non-personnel budgets related to maintenance and operations are the remaining areas that are not entirely fixed.

The Fire Department and the Finance Department monitor revenues associated with emergency medical services, mutual aid reimbursements and fire prevention activities. Fire prevention-related revenues were extensively revised and adopted in FY 2004-05. Fire prevention-related revenues include fees for fire inspection, fire protection system plan reviews and hazardous uses. The Fire Prevention Weed Abatement Program is essentially a self-sustaining program, with fees generally covering the cost of weed abatement services.

Fire emergency operations revenues include emergency medical services fees, mutual aid response reimbursements, false alarm response fees, federal grants and donations. Emergency medical service fees were reviewed and new fees were adopted by the City Council for implementation in FY 2005-06. Mutual aid fees are revised annually. The Fire Department continues to seek revenue generation and enhancement opportunities.

#### **ACTION PLAN**

The Fire Department has reviewed the use of potential additional performance measures related to cost efficiency for FY 2004-05. These include fire operating and vehicle expenditures costs per capita and Fire Department staffing per population served. These two potential additional cost-related performance measures are reported for fire departments nationwide in the Annual Comparative Performance Measures Report produced by the Center for Performance Measurement of the International City/County Management Association (ICMA). The Fire Department has analyzed these two (2) measures as possible future year additions or replacements for cost-related performance measurements in order to establish ICMA-recognized national comparative benchmark standards.

# POINT OF CONTACT

#### FIRE CUSTOMER SERVICE AND SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction.

#### THE MEASUREMENT

A survey is mailed to a random sample of customers each month after emergency medical services (EMS) have been rendered.

#### WHAT THE DATA MEANS

Highly satisfied customers are an indication that the Fire Department is providing services in a manner that is desired and/or expected, contributing to greater confidence in the Fire Department and local government in general, resulting in a high quality of life for community members.

#### DEPARTMENT INVOLVED

Fire.

#### **BENCHMARK**

95% of customers rate all EMS services as "Good" or "Excellent" in all customer service survey categories, utilizing a rating scale of 1=Very Poor, 2=Poor, 3=Fair, 4=Good, and 5=Excellent.

#### RESULTS

The benchmark was exceeded in all categories. The majority of results show minimal changes from the previous year's survey.

	2002-03	2003-04	2004-05
BENCHMARK	<u>&gt;</u> 95%	<u>&gt;</u> 95%	<u>&gt;</u> 95%
911 Dispatch	97%	98%	97%
Response Time	99%	98%	97%
Competence	100%	99%	98%
Courtesy	99%	100%	99%
Transportation	96%	100%	97%

# **ANALYSIS**

In FY 2004-05, of the 550 mailed surveys, 247 surveys were completed and returned, resulting in a return rate of 45%. The customer service and satisfaction survey is conducted only with emergency medical service recipients, because those calls represent approximately 72% of all Fire Department calls for service. In FY 2003-04, the Fire Department began dispatch services with the North County Dispatch Joint Powers Authority

(NCDJPA). The customer service and satisfaction survey results indicate that from a customer perspective, this dispatch change resulted in continuing positive outcomes. The survey results also continue to validate that the dispatchers and emergency medical service personnel are providing excellent customer service. In FY 2004-05, as in previous years, the vast majority of comments reflected a sincere appreciation for the Fire Department's assistance.

#### **ACTION PLAN**

The Fire Department continuously reviews the customer service and satisfaction survey data to identify trends and patterns. Any identified areas for improvement are analyzed and recommendations for improvement are developed, operationally implemented, and monitored. The Department is reviewing methods by which to best convey survey results to personnel involved in emergency medical services delivery. The Carlsbad Fire Department is always seeking new and better opportunities to expand and improve upon the level and quality of customer service and satisfaction.

#### POINT OF CONTACT

#### FIRE STATIONS GROWTH MANAGEMENT STANDARD

#### THE OUTCOME

Emergency response resources that are distributed throughout the City in a manner that ensures effective and efficient delivery to the community of top quality fire, rescue, and emergency medical services.

#### THE MEASUREMENT

The number of dwelling units outside a five-minute "travel time" from the nearest fire station shall not exceed 1,500 units.

#### WHAT THE DATA MEANS

It was the intent of the City's Growth Management Plan (GMP) to ensure that adequate fire department services were maintained as residential development progressed toward build-out of the City. The GMP standard recognized a five-minute "travel time" from a fire station to the emergency scene as a reasonable means of locating fire station facilities throughout the community.

At the time the GMP was developed, scientific fire behavior information and recognized best practices supported the position that a response time of five minutes would result in effective fire incident intervention. To determine the most desirable geographic sites for future fire stations, it was necessary to convert the five-minute response time to a measurable distance that could be applied to a future road network scheme. This distance, or "reach", attainable by emergency responders in a five-minute travel time was calculated to be 2.5 miles at an estimated average speed of 30 miles per hour. The reach of each existing and potential future fire station locations was then plotted on the planned road network maps of that time. This process enabled the fire department to predict the need for six fire stations at build out, each providing service to several Local Facility Management Zones (LFMZ).

Once the number of fire station sites was determined, the timing of future fire station installations became the question. The threshold of 1,500 units was adopted as the maximum number of dwellings that could exist outside a five-minute travel time, or 2.5-road mile distance of the nearest fire station. Hence, development within a fire station response area that would exceed the 1,500-unit threshold would be delayed until fire station facilities are relocated or added in order to alleviate the shortfall.

#### **DEPARTMENTS INVOLVED**

Fire, CIS, Planning.

#### RESULTS

The Fire Department is in compliance with the Growth Management Plan standard. None of the six fire station response areas have experienced growth that exceeded the 1500 dwelling units outside a five-minute travel time.

#### **ANALYSIS**

Because the GMP provides no other trigger mechanism for the installation of additional fire stations, it follows that up to 1500 dwelling units could exist outside the five-minute reach of the closest fire station for an indeterminate length of time without violating the GMP standard. The five-minute travel time measure was selected exclusively as a means of logically positioning emergency response resources throughout the City. Therefore, the standard should be applied as a means of measuring compliance with locating fire facilities in accordance with the GMP, not the performance of the Fire Department meeting service responsibilities.

#### **ACTION PLAN**

The Fire Department continues to monitor the GMP standard compliance as housing development projects are proposed in the City. Four fire stations have been constructed at their permanent location. Fire Station 3 (3701 Catalina Drive) will be relocated as development occurs in their response area. Fire Station 3 will most likely be relocated farther south and east to coincide with development in the NE Section of the city. Fire Station 6, currently located in a temporary facility at 3131 Levante Street, is being relocated farther north to coincide with the housing development occurring in the SE section of the City. The permanent site for Fire Station 6 has been determined, and the fire station is in the final design and permitting phase of development.

# POINT OF CONTACT

#### FIRE EMERGENCY MEDICAL SERVICES RESPONSE TIME

#### THE OUTCOME

Maximization of positive outcomes in a medical emergency.

#### THE MEASUREMENT

Fire Department response time for the first and second units on scene for emergency medical service calls.

#### WHAT THE DATA MEANS

One of the critical factors in achieving a positive outcome in an emergency, which threatens life, is providing medical services as quickly as possible. The Fire Department emergency medical services (EMS) response time data represents all Fire Department EMS responses in FY 2004-05. Responses that were cancelled enroute are not included in this data set.

#### **DEPARTMENTS INVOLVED**

Fire.

#### **BENCHMARK**

For EMS calls for service, first Fire Department apparatus on the scene within five (5) minutes or less ninety percent (90%) of the time and the second Fire Department apparatus on the scene within eight (8) minutes or less ninety percent (90%) of the time.

#### RESULTS

EMS Unit(s) on scene 90% of the time within specified time frames

BENCHMARK	Fiscal Year	ICMA *	Carlsbad
1st Unit on Scene in 5 minutes	FY 2004-05	57.9	
2 <sup>nd</sup> Unit on Scene in 8 minutes	FY 2004-05	N/A	

 $<sup>^{\</sup>star}$  2004 ICMA Mean for Emergency Calls by responding agencies with a population under 100,000

#### **ANALYSIS**

The Fire Department continuously monitors response times for all Fire Department Priority One calls for service. Since approximately 72% of the 6,706 FY 2004-05 annual Fire Department calls were for emergency medical services (EMS), EMS-specific response times warrant additional analysis.

The Fire Department researched and analyzed national, state and local mandates and guidelines, as well as fire and medical industry studies and their resulting standards. These analyses resulted in the development of the abovenoted new EMS response time goals. For optimal patient outcomes, all of the

mandates, guidelines and studies support the adopted goal of a minimum on scene arrival of the first apparatus within 5 minutes and the second apparatus within 8 minutes.

The complement of apparatus required for an EMS call is one (1) Advanced Life Support (ALS)-equipped fire engine, with three (3) personnel, one (1) of which is a Paramedic/Firefighter, and one (1) ALS-equipped ambulance with two (2) Paramedic/Firefighters. Depending upon apparatus location at the time of the call, the fire engine may be the first apparatus to arrive on scene. Since effective field emergency medical services require a minimum of two (2) paramedics and the fire engine has only one (1) Paramedic/Firefighter trained to begin patient assessment and treatment, it is critical that other dispatched unit, the ambulance, arrive on scene to add the second Paramedic/Firefighter to the incident to effectively deliver patient assessment and treatment.

The adopted response time goal for EMS calls will assist the Fire Department in analyzing EMS service delivery methods to achieve its on-going mission to efficiently and effectively meet the critical emergency medical needs of the community.

#### **ACTION PLAN:**

Throughout the fiscal year, the Fire Department will routinely analyze EMS response time data. If these analyses reveal that response times are consistently less than benchmark, the department will identify the causes and develop, implement, and monitor new corrective practices. The Fire Department has identified potential internal organizational enhancements to optimize EMS response times including updating station-alerting systems.

Recent research has shown that the current technology, which would provide the greatest enhancement to response times, is a computer-linked dispatch terminal and an automatic vehicle locator system in each apparatus. The addition of these systems represents the next logical technological upgrade that would provide the most significant enhancement to decrease response time to all emergency incidents. The Fire Department will continue research efforts and, if warranted, develop a plan to acquire and implement these enhancements. In FY 2005-06, the Fire Department will also continue to research changes to station alerting systems.

#### POINT OF CONTACT

#### **FIRE PREVENTION INSPECTIONS**

#### THE OUTCOME

Conduct State-mandated fire and life safety inspections of facilities in the City of Carlsbad

#### THE MEASUREMENT

Complete all State of California-mandated annual inspections for all public and private schools, apartments, and hotels located in the City of Carlsbad.

#### WHAT THE DATA MEANS

The data will demonstrate that the City of Carlsbad is in compliance with State-mandated requirements to conduct inspections in high life/safety occupancies including all public and private schools, apartments, and hotels located in the City of Carlsbad.

#### DEPARTMENT INVOLVED

Fire.

#### **BENCHMARK**

Applicable benchmarks are being reviewed for use in reporting FY 2005/06 data.

#### RESULTS

This is a new Performance Measure. Data will be collected and reported for FY 2005/06.

#### **ANALYSIS**

The Fire Prevention Division conducts annual required inspections for all public and private schools, apartment, and hotels located in the City of Carlsbad. In October 2005, the Fire Prevention Division instituted a new database management system called "Permits Plus," which allows the tracking and scheduling of inspections for state-mandated occupancies in the City.

#### **ACTION PLAN**

The Fire Prevention Division will establish the total number and types of occupancies and then develop a plan that ensures annual compliance and a monthly review process to ensure completion of all required inspections during the fiscal year.

#### POINT OF CONTACT

#### FIRE PREVENTION DEVELOPMENT PROCESS

#### THE OUTCOME

Conduct State-mandated fire and life/safety reviews of all development plans for building construction in the City of Carlsbad in a timely manner.

#### THE MEASUREMENT

Conduct fire and life/safety reviews of development plans within ten (10) business days of submission to the Fire Prevention Division.

#### WHAT THE DATA MEANS

Enhance customer service by minimizing construction delays due to extended plan processing time. Ensure a maximum of 10 working days for Fire Prevention's plan review and processing ensures continuity of the plan check process with other involved MSAs.

#### DEPARTMENT INVOLVED

Fire.

#### **BENCHMARK**

Ten (10) days from date of submission 90% of the time.

# **RESULTS**

This is a new Performance Measure. Data will be collected and reported for FY 2005/06.

#### **ANALYSIS**

The Fire Prevention Division conducts State-mandated fire and life/safety reviews of all development plans for building construction in the City of Carlsbad. In October 2005, the Fire Prevention Division instituted a new database management system called "Permits Plus," which allows the tracking of plan check turn-around times.

# **ACTION PLAN**

The Fire Prevention Division will establish a process that monitors a plan throughout the ten (10) day period, highlighting those plans that are approaching the end of the ten (10) day plan check cycle. Plans nearing the end of the cycle can then be identified and expedited in order to meet the benchmark.

#### POINT OF CONTACT

#### POLICE RESPONSIVENESS

#### THE OUTCOME

Minimize damage to life and property and increase probability of criminal apprehension with a fast patrol response.

#### THE MEASUREMENT

All calls are assigned a priority. The determination of a call's priority depends on the severity of the crime and the time frame in which it occurred. There is a priority assigned to each crime code within the computer-aided dispatch (CAD) system but the dispatcher has the option to upgrade a call's priority based on what the caller says or what the dispatcher may hear. The response time is the time it takes from the time the call is received to when the first police unit arrives on scene and can be broken down into two components – the time it takes to take and dispatch the call, and the officer travel time.

**Priority 1** calls are life and death emergencies such as all violent crimes in progress, some non-violent crimes in progress, armed robbery alarms, injury or no detail traffic collisions, and burglaries in progress. Other examples include kidnapping, domestic violence, or assault in progress. Priority one calls are generally less than one percent of the total police call volume.

**Priority 2** calls include non-violent crimes in progress such as petty theft and burglary alarms.

**Priority 3** calls include "cold" reports - reports being taken after the crime has occurred. Examples include coming home and finding that your house was burglarized earlier in the day or waking in the morning and discovering that your car has been stolen.

**Priority 4** calls are miscellaneous calls that generally are not citizen-initiated and may not result in a citizen interaction. Examples include a request for an officer to make a phone call or a request for extra patrol in a certain area.

Although response time data has been measured for many years, a new computer-aided dispatch system was installed in May 2005 and data between the two systems is not completely comparable. Data from the former CAD system reported a combined average response time for citizen calls and officer-initiated calls. These officer-initiated calls generally have a response time of zero since the officer reports the call at the same time he is on-scene. The new CAD system breaks out the citizen calls for service so the response time is a more accurate reflection of our responsiveness to our citizens.

# WHAT THE DATA MEANS

Most customers report that they believe response time reflects quality of service. As a result, response time is often a large factor in a customer's satisfaction rating. We have numerous data indicating that fast response times are very important to the customer. In actuality, response times are a reflection of not only quality of service but also other factors such as traffic circulation, staffing, and overall activity levels. Since priority one calls are only two percent of the total police call volume, the response times for priorities two and three are also examined because they are key to customer satisfaction as they reflect the majority of our citizen interactions.

#### DEPARTMENTS INVOLVED

Police

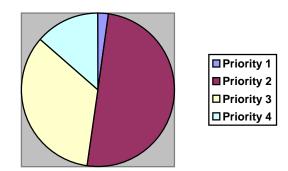
#### BENCHMARK

The FY 2004 ICMA mean average priority one response time was 6.1 minutes for cities under 100,000 population. Carlsbad has used the benchmarks of 6, 15, and 30 minutes for priorities 1, 2, and 3 respectively for many years. Since ICMA has no benchmark for the other priorities and Carlsbad believes that our responsiveness to calls other than priority 1 is an important customer service measure and workload indicator, the police department is presenting both internal and ICMA benchmarks.

#### RESULTS

	ICMA BENCHMARK	CARLSBAD BENCHMARK	CARLSBAD May '05 - Jan. 31, '06
Priority 1	6.1 mins.	6.0 mins.	6.8 mins.
Priority 2	N/A	15.0 mins.	12.4 mins.
Priority 3	N/A	30.0 mins.	27.7 mins.

May 2005 - January 2006



#### **ANALYSIS**

Because the new CAD system data is not fully comparable to the former CAD system, only the data from the new system is being examined in this measure. We presently have nine months of data in the new system.

The average priority 1 response time exceeds both benchmarks, however, it is difficult to determine if this is new or if this has been occurring for an expanded period since we cannot easily compare to data prior to May 2005. However, the average priority 1 response time has been fairly consistent month-to-month over the past nine months. There were two calls identified that had incorrect, extended response times of almost 60 minutes, thus increasing the priority one average.

The average priority 2 response time has shown improvement during this time period due to an improvement in the dispatching time (approximately one minute faster); this improvement is the result of the communications operators becoming more familiar with the new system. The average priority 3 response time has also been consistent over the past nine months.

The travel time component of response time has remained consistent over the past nine months for all three priorities.

#### **ACTION PLAN**

Response time will continue to be closely monitored on a monthly basis. The police beats were realigned with the new CAD system and response time by beat will be closely monitored to assure that geographic deployment is maximized for response time.

The department continues to develop reports from the new CAD system and will report response time in a call distribution format (ex: 90 percent of all priority one calls were responded to in six minutes or less) in next year's State of Effectiveness report.

#### POINT OF CONTACT

Lynn Diamond, Sr. Management Analyst, 760-931-2170, ldiam@ci.carlsbad.ca.us

# CRIME CASES CLEARED

#### THE OUTCOME

Maximize the number of crimes solved.

#### THE MEASUREMENT

A case is considered cleared when at least one person is arrested, charged, and turned over to court for prosecution, or the case is cleared exceptionally. A case can be cleared exceptionally if there is cause to arrest the suspect but there is some reason outside law enforcement that precludes arresting the suspect. The number of FBI index cases cleared as a percentage of total FBI index crime cases is a fairly standard measure used throughout the law enforcement community. Clearance rates have been measured and reported by the police department for at least 25 years.

In additional to the percentage for all FBI index crime cases overall, we also measure the percentage separately for violent crimes (homicide, rape, robbery, and aggravated assault), and for property crimes (burglary, larceny-theft, and motor vehicle theft) to help further identify strengths and weaknesses.

#### WHAT THE DATA MEANS

The clearance rate is one indicator of the achievement of law enforcement personnel in solving crimes. Although generally thought of as a reflection of the investigations function, it also reflects the performance of the patrol and police records functions.

Some of the factors that influence clearance rates include: policies and procedures used by various agencies; workload and/or the volume of cases reported; personnel staffing for preliminary and follow-up investigation; differential emphasis placed on investigating specific types of crime; the quality and nature of the crimes assigned for investigation; and the training and experience of officers. Changes in clearance rates over time could reflect data variability and/or changes in productivity.

#### DEPARTMENTS INVOLVED

Police.

#### **BENCHMARK**

The police department has established a benchmark to be within the top onethird of the county with regard to clearance rates for all crime, for violent crimes, and for property crimes. The police department uses San Diego County data since clearance data can vary greatly from state to state and even somewhat by county within California. We are fairly confident in our local county data due to a shared database that all agencies use and regular quality assurance audits that are conducted.

# **RESULTS**

	BENCHMARK	CARLSBAD 2004
OVERALL CRIME	Top one-third	Yes
VIOLENT CRIME	Top one-third	Yes
PROPERTY CRIME	Top one-third	Yes

Note: Individual city data is not yet available for 2005.

RANK	CITY	2004 OVERALL CRIME CLEARANCE RATES
1	Carlsbad	31%
2	Lemon Grove	27%
3	San Marcos	23%
4	Santee	22%
5	La Mesa	22%
6	Poway	21%
7	National City	20%
8	Vista	20%
9	Encinitas	19%
10	Imperial Beach	19%
11	Unincorporated/Sheriff's	19%
12	El Cajon	18%
13	Oceanside	17%
14	Chula Vista	16%
15	San Diego	16%
16	Escondido	16%
17	Solana Beach	15%
18	Coronado	13%
19	Del Mar	9%

RANK
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2004 VIOLENT CRIME CLEARANCE RATES							
CITY	RATE						
Del Mar	77%						
Carlsbad	69%						
Santee	69%						
La Mesa	68%						
Solana Beach	64%						
Unincorporated	59%						
Imperial Beach	58%						
Lemon Grove	58%						
Vista	56%						
San Marcos	55%						
San Diego	53%						
Encinitas	49%						
Escondido	46%						
Poway	45%						
Oceanside	43%						
El Cajon	39%						
Coronado	37%						
Chula Vista	34%						
National City	28%						

CLEARANCE R	
CITY	RATE
Carlsbad	26%
Lemon Grove	22%
La Mesa	18%
National City	18%
Poway	18%
San Marcos	18%
Encinitas	15%
Santee	15%
El Cajon	15%
Vista	14%
Oceanside	13%
Escondido	13%
Unincorporated	12%
Imperial Beach	11%
Coronado	11%
Lemon Grove	11%
Solana Beach	10%
San Diego	10%

4%

Del Mar

2004 PROPERTY CRIME

#### CARLSBAD'S CLEARANCE RATES: 1994 - 2004

	<u> 1994</u>	<u> 1995</u>	<u> 1996</u>	<u> 1997</u>	<u> 1998</u>	<u> 1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Overall	11%	16%	21%	30%	24%	23%	23%	23%	19%	21%	31%
Violent	22%	43%	48%	52%	48%	45%	56%	60%	47%	51%	69%
Property	9%	13%	18%	27%	22%	21%	19%	20%	16%	17%	26%

#### **ANALYSIS**

Carlsbad's 2004 overall clearance rate (41%) was the highest Carlsbad has achieved in at least 16 years. Although there has been much fluctuation in overall clearance rates over the years, Carlsbad has shown a steady increase the past three years. In contrast, the county average overall clearance rate has decreased in the past five years to an average rate in 2004 of 17%, almost half of Carlsbad's rate of 31%.

Carlsbad's 2004 violent crime clearance rate (69%) was also the highest Carlsbad has achieved in at least 16 years. Again, there has been significant

fluctuation in the rate over the years but there has been a steady increase in the past three years. This is especially significant given the downward trend in the county's average rate over the past five years to 51% in 2004.

With regard to the property crime clearance rate, Carlsbad has had several other years with clearance rates equally good to those achieved in 2004 (26%), however, it has fluctuated greatly with no steady trend or predictability. 2004 was the third year of a steady improvement in the property crime clearance rate. At 26%, Carlsbad continues to far exceed the county average of 13%.

#### **ACTION PLAN**

Although our performance has exceeded the benchmark for the past several years, because of the variability in the results over the years a definitive plan was needed to maintain high clearance rates for an extended period. As a result, a management goal was developed last year to analyze the methods by which cases are reported, documented, assigned, investigated and closed, as well as the development and implementation of strategies to maximize clearance rates for an extended period.

Sustaining this performance level is now the challenge. To help assure performance consistency, last year's team identified and/or implemented the following to help sustain clearance rate performance:

- Detective training to teach each new detective in proper clearance rate procedures.
- Fingerprint all misdemeanor arrest suspects and ensure that the policy is consistently practiced by all patrol shifts.
- Improve patrol follow-up and investigation by better communicating expectations, education through the field training officer program, implementing a standard report format (in progress), improved accountability through the evaluation process, and quality control follow up including spot checks and feedback from Investigations.
- Improved evidence collection and processing (in progress)
- Ongoing audits in investigations to track the accuracy of clearance data, and identify potential problems before they adversely affect clearance rates.
- Quarterly Investigative supervisor's review of detectives' open cases.

#### POINT OF CONTACT

Lynn Diamond, Sr. Management Analyst, 760-931-2170, ldiam@ci.carlsbad.ca.us

#### **COMMUNITY PERCEPTION OF CRIME**

#### THE OUTCOME

Citizens' sense of community safety

#### THE MEASUREMENT

A general citizen survey to measure how safe people feel in their community.

#### WHAT THE DATA MEANS

Many factors influence citizens' sense of safety in a community. Some of these factors include the media, current events including high profile crime cases, the age distribution in a community, neighborhood lighting, gender, city size, perception of police responsiveness, level of information regarding neighborhood crime and personal experiences.

#### DEPARTMENTS INVOLVED

Police

#### BENCHMARK

The benchmark for community sense of safety is the ICMA "Citizen Rating of Safety in Their Neighborhoods" for fiscal year 2004 for cities with a population under 100,000. Although ICMA uses a four-category response (very unsafe, somewhat safe, reasonably safe, and very safe), the City's survey consultants recommended using an 11-point scale for increased accuracy. Carlsbad used responses of 9 or 10 on a 0 through 10-point scale (0 – not safe at all; 10 – very safe) for the "very safe" category.

#### RESULTS

How safe do you feel walking alone in your neighborhood during the day?

#### PERCENT RESPONDING "VERY SAFE"

	2000	2001	2002	2003	2004	2005
CARLSBAD	86%	87%	87%	88%	N/A	85%
BENCHMARK	62%	64%	67%	66%	N/A	57%
AVERAGE	9.5	9.6	9.6	9.5	N/A	9.4

How safe do you feel walking alone in your neighborhood at night?

#### PERCENT RESPONDING "VERY SAFE"

	2000	2001	2002	2003	2004	2005
CARLSBAD	41%	43%	39%	43%	N/A	44%
BENCHMARK	31%	33%	37%	35%	N/A	45%
AVERAGE	7.5	7.6	7.6	7.8	N/A	7.8

#### **ANALYSIS**

Carlsbad's ratings have been consistent for the past five years and are generally higher than the benchmark. The benchmark for daytime safety decreased while the benchmark for nighttime safety increased. Even with these changes, Carlsbad is consistently close to or above the benchmark.

In looking at the safety survey responses, differences were found in the ratings of daytime as well as nighttime safety based on respondent age. Residents over 60 gave somewhat lower ratings for safety than younger age groups. No other significant differences in the 2005 daytime safety ratings were found when comparisons were made based on location of residence, length of residence, household income, home ownership, presence of children in the household, or household size.

Homeowners rated their feelings of safety at night higher than renters (7.6), Respondents with higher incomes generally reported higher ratings of nighttime safety than those with lower incomes. Location of residence, length of residence, presence of children in the household and household size did not affect ratings of nighttime safety.

The general trend for these safety ratings is reflected in the evaluation of Carlsbad's Police Services. In general residents who feel higher levels of safety in their neighborhood rate their satisfaction with police services higher.

#### **ACTION PLAN**

The department will continue programs that give citizens a strong feeling of police presence such as bicycle patrol, and senior volunteer neighborhood patrols, especially following residential burglaries. The department will also continue the crime statistics hotline, providing accurate and timely crime information to the public and will look for ways to expand the distribution of crime information.

# POINT OF CONTACT

Lynn Diamond, Sr. Management Analyst, 760-931-2170, ldiam@ci.carlsbad.ca.us

#### POLICE OPERATING COSTS

#### THE OUTCOME

The efficient use of general fund resources.

#### THE MEASUREMENT

Operating cost per capita for police services.

#### WHAT THE DATA MEAN

The efficient use of financial resources allows the City to provide a higher level of service, more public services, or a reduced cost of services to the taxpayer.

#### DEPARTMENTS INVOLVED

Police

#### **BENCHMARK**

The operating cost per capita shall not exceed the San Diego County average for comparably sized municipal law enforcement agencies.

#### RESULTS

	01-02	02-03	03-04
BENCHMARK	\$168	\$184	\$194
CARLSBAD	\$165	\$173	\$197

#### ANALYSIS

Carlsbad is close to the benchmark for this measure and is comparable to other cities of similar size. Compared to the previous fiscal year, Carlsbad's police expenditures increased by 14% in 2003-04 compared to a 5% increase for the benchmark agency group overall.

The majority of this increase was due to a 16% increase in salary and benefit expenditures. Salary and benefit costs make up the majority of the police department's budget; they were 79% of the 2003-04 budget. The largest increases in salary and benefits were for retirement, health insurance, and workers compensation.

Maintenance and operations expenses increased by 8% between 2002-03 and 2003-04. Much of this increase was due to initial expenses associated with the public safety technology project. The department was able to maintain or reduce remaining maintenance and operation costs.

	2003-04	2004	Per Capita
	Expenditures	<b>Population</b>	Cost
Chula Vista	\$35,831,638	208,510	\$172
La Mesa	\$10,116,154	55,885	\$181
Oceanside	\$32,255,226	172,800	\$187
Escondido	\$26,914,746	140,088	\$192
Carlsbad	\$18,234,521	92,719	\$197
National City	\$12,158,331	60,027	\$203
El Cajon	\$23,046,136	97,359	\$237
Coronado	\$6,753,652	26,405	\$256
Total	\$165,310,404	853,793	\$194

Note: The jurisdictions listed above are those in San Diego County that provide their own law enforcement services. For data comparison purposes, expenditures include salary and benefits, plus department services and supplies. Capital expenditures and animal control services are excluded.

For comparison purposes, the ICMA average per capital operating cost for 2003-04 was \$179 for jurisdictions under 100,000 population (25 cities).

#### **ACTION PLAN**

The police department will continue to carefully monitor its budget, seek out alternative, non-general fund sources for funding such as grants, and continually look for less costly options while maintaining service levels.

#### POINT OF CONTACT

Lynn Diamond, Sr. Management Analyst, 760-931-2170, ldiam@ci.carlsbad.ca.us

#### POLICE CUSTOMER SERVICE & SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction.

#### THE MEASUREMENT

This measure uses a multi-method approach combining:

- Survey results (Public Opinion Survey and Crime Victim Survey)
- Personnel complaints

The **survey portion** takes the results from the section of the police department's crime victim survey that relates to satisfaction with various police services. The survey questions ask respondents to rate dispatch, patrol, detectives, records, and administration. This customer satisfaction measure has been in place for approximately 15 years. Also reported is the police service rating from the City's annual public opinion survey.

The **complaints portion** of the measure is the number of sustained formal complaints made by citizens about police employees per 10,000 calls for service. After investigation complaints are classified as sustained, non-sustained, exonerated, or unfounded. A sustained complaint is one that involves a citizen complaint of an incorrect action on the part of a police employee that is upheld as an incorrect action. Using a ratio takes into account increasing contacts as the population and size of the workforce increase. The number of complaints by category has been measured for many years.

#### WHAT THE DATA MEAN

Highly satisfied customers are an indication that we are providing services in a manner that is desired and/or expected, contributing to greater confidence in the police department and local government in general, resulting in high quality of life for community members.

The **survey portion** of the measure reflects customer satisfaction among those who have had a direct interaction with us through the filing of a crime report. Over time, this measure can help us identify areas of strength and weakness, as well as identify areas where changes in service levels are occurring. The results from the annual public opinion survey reflect the community's overall perception and satisfaction with police services.

The **complaints portion** of the measure reflects the quality of the police employees and the level of customer service. Both a department directive

(1.13) and a legal requirement (P.C. 832.5) define when a formal complaint is taken.

#### **DEPARTMENTS INVOLVED**

Police

#### **BENCHMARK**

For the **customer survey** portion of the measure, the department has set the benchmark at 90% of customers rate police services as good (4 on a 1-5 scale) or excellent in all customer service survey categories, utilizing a rating scale of 1=Unacceptable, 2=Poor, 3=Satisfactory, 4=Good, and 5=Excellent. ICMA FY 2004 survey results report an average of 62% good or excellent for cities with a population of 100,000 or less and is a comparable data source.

The benchmark the department has set for the *citizen complaints* portion of the measure is zero sustained complaints per 10,000 calls for service.

#### **RESULTS**

	ICMA AVERAGE	CARLSBAD BENCHMARK	CARLSBAD 2005
PUBLIC OPINION SURVEY	-	90%	90%
CRIME VICTIM SURVEY	62%	-	81%
SUSTAINED COMPLAINTS/10,000	N/A	0	TBD

#### % RATING POLICE SERVICE AS GOOD OR EXCELLENT

	2000	2001	2002	2003	2004	2005
911 Dispatcher	89%	85%	90%	85%	87%	82%
Uniformed personnel	94%	93%	90%	91%	90%	92%
Detectives	85%	81%	86%	80%	85%	84%
Records	89%	83%	89%	88%	79%	82%
Total	89%	86%	88%	87%	87%	81%

# SUSTAINED PERSONNEL COMPLAINTS PER 10,000 CALLS

	2001	2002	2003	2004	2005
Sustained Citizen Complaints	0	2	0	1	2
Per 10,000 Calls	0	0.30	0	0.14	0.27
Calls	68,798	66,713	73,963	73,667	74,546

#### **ANALYSIS**

**Customer Survey:** Traditionally, uniformed personnel have the highest customer service rating of all the police service areas; they have consistently rated at 90% or higher in the crime victim survey and this continued in 2005. The Communications Center's rating was lower in 2005; this may be due to the transition to the new computer-aided dispatch system and the time needed for communications operators to become completely familiar with the system. The investigations ratings maintained consistency in 2005 while the records division rating is showing an increasing trend after a low in 2004.

The overall citizen satisfaction with services based on the annual public opinion survey has been consistent with an overall rating of 90% rating police services as good or excellent.

**Citizen Complaints:** The total number of complaints filed each year, as well as the number of those that are sustained, is a relatively small number. The rates per 10,000 calls for service presented usually represent just a few sustained complaints per year out of less than 20 total annual complaints. In 2005 we had 2 sustained citizen complaints out of a total of 20.

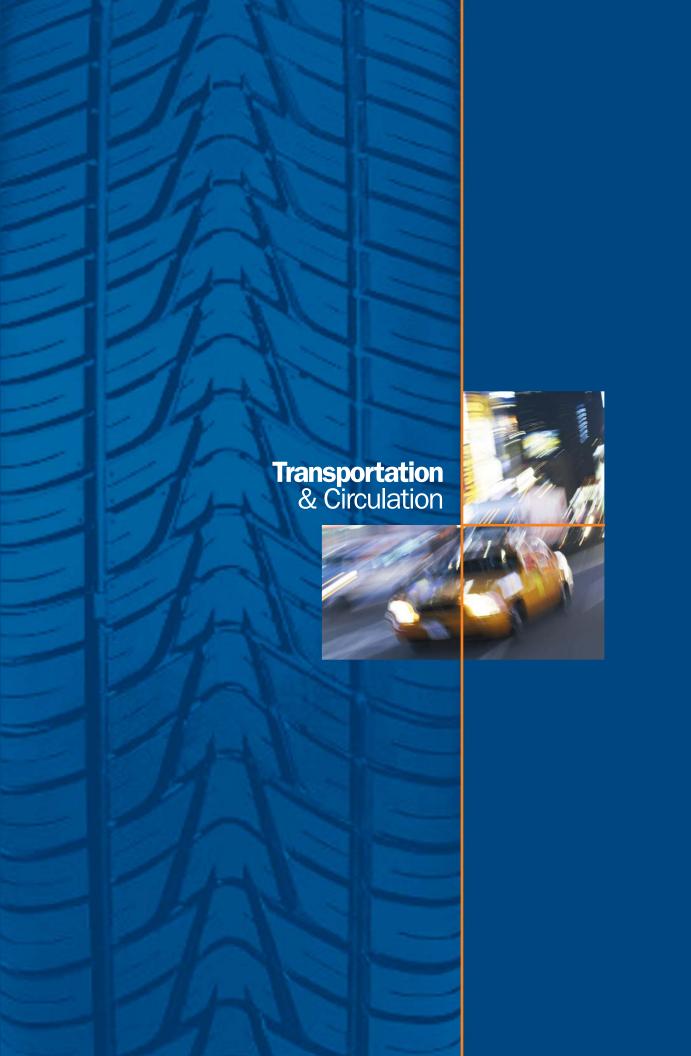
#### **ACTION PLAN**

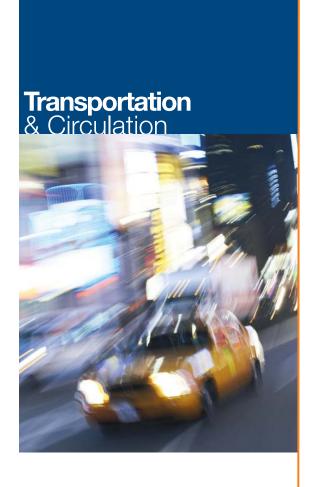
Key customer service processes will be reviewed in the three areas with overall ratings less than 90% (dispatch, detectives, records) in an effort to increase the ratings for the upcoming year.

Citizen complaints will continue to be carefully analyzed and monitored.

#### POINT OF CONTACT

Lynn Diamond, Sr. Management Analyst, 760-931-2170, ldiam@ci.carlsbad.ca.us





Provide and support a safe and efficient transportation system that moves people, services, and goods throughout Carlsbad



# Why is it important to Carlsbad?

By creating and maintaining a balanced circulation system, the City is able to provide transportation choices and improvements to mobility.

The ability to move people and goods is essential to the economic vitality and quality of life in a region. Business location and expansion decisions, consumer choices regarding goods and services, and land values are largely a function of accessibility and are directly related to quality of life.



# Transportation and Circulation Indicators

- Roadway Service Delivery
- Roadway Cost Efficiency
- Roadway Safety
- Roadway Circulation
- Roadway Reliability
- Transportation Customer Satisfaction
- Growth Management Circulation

# Goals

- Protective-Permissive Left-Turn Feasibility Report
- El Camino Real from Chestnut to Tamarack

# **Current Results**

#### **TRAFFIC**

- Results of the 2005 Growth Management Traffic Monitoring program indicate that ALL roadway segments and intersections within the study meet the Growth Management Circulation Standard.
- In general, travel times on El Camino Real have increased. This is in line with the overall increase in traffic volumes from year to year. Construction work has also impacted travel times.
- Travel times on Palomar Airport Road have also increased but were found to be within the ranges established by previous studies. This is in line with the overall increase in traffic volumes from year to year. A notable exception is the decrease in travel times on Palomar Airport Road for the westbound direction during the am peak period. This may be the result of the newly added third westbound lane between the east City limits and Melrose Drive.
- The number of reported traffic collisions is consistent with previous years.

#### STREET MAINTENANCE

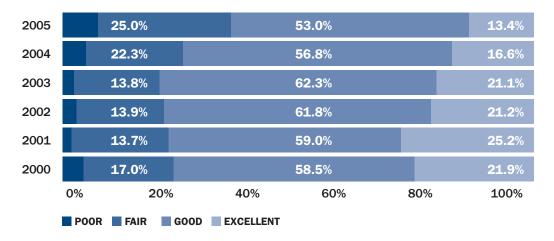
- The City's roadway inventory has increased due to the development of several large projects. These projects include Bressi Ranch, La Costa Greens and La Costa Oaks amongst others. While these additional roadways represent a significant addition in total lanemiles, they have not yet had an impact on overall programs costs. Consequently for 2005, the results show that expenditures in Carlsbad decreased from the previous year of \$592 per lane-mile.
- Staff continues to develop annual work programs to ensure preventive maintenance is performed. A number of new measures in this area have been developed; results will be included in next year's report.



#### **ROADWAY CONDITIONS**

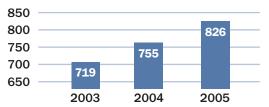
- The overall roadway conditions as monitored through the roadway condition index reflected an average rating of 90 for roadways within the City, exceeding the benchmark of 80 or greater.
- The road condition rating as reflected in the annual City of Carlsbad Public Opinion Survey shows 64% of responses as either "Good" or "Excellent." These results reflect a recent trend of decreasing satisfaction with road conditions. The positive ratings has slipped from encompassing over 80% of respondents in 2002-2003 to only accounting for 66% of respondents in the current year. A contributing factor to this decrease is the significant construction in the south part of the City resulting in roads being impacted by traffic control plans that reduce capacity and increase delays.

# **Overall Road Condition Ratings 2000-2005**





# **Increase in Mileage of Roadway**



# **Trends and Observations**

- Completion of a number of scheduled maintenance activities report results below benchmark. Staff continues to analyze alternative work methods to improve the balance of scheduled versus unscheduled work.
- As the roadway system continues to increase through development of the City, the challenges in trying to achieve the balance between scheduled and unscheduled maintenance will continue.
- The total increase in lane miles between 2004 and 2005 represented a 12% increase to the streets inventory, and while it did not have a corresponding increase on the budget this year, it is expected that it will have a significant impact in upcoming years.
- Current maintenance expenditures are running very close to budget. This is concerning as past budgets have not grown at the same pace as development. There is a concern that as the City grows larger and adds more roads, streetlights, and traffic signals, and more of these items begin to breakdown and need routine maintenance and repair, that the Streets maintenance workload continue to increase. This demand for service may result in the need for additional resources.

#### Public Works

#### ROADWAY SERVICE DELIVERY

#### THE OUTCOME

High quality roadway experience.

#### THE MEASUREMENT

A multi-modal approach combining:

- Roadway Service
- Roadway Environment

**Roadway Service:** The roadway service measure is tied to the Maintenance Assessment Program and is achieved by completing 90% of the scheduled maintenance activities for the various components of the roadway system such as sidewalk repairs, traffic signals, street striping, traffic signs, and street lighting.

**Roadway Environment:** The roadway environment measure is also tied to the Maintenance Assessment Program and monitors such things as litter control, median maintenance and weed control.

#### WHAT THE DATA MEANS

**Roadway Service:** In FY 2002-2003, staff developed a Maintenance Assessment Program to help evaluate the condition of public facilities. This program establishes and documents the frequency of recommended preventive maintenance and/or repair, then measures the level of accomplishment each year by comparing percent of completed work to scheduled maintenance or repair standards. The Public Works Maintenance Management and Hansen Work Management systems are used to collect and analyze performance data. Through use of the Maintenance Assessment Program, the Roadway Service measures the level of attainment and response times of the established preventive maintenance and repair programs.

**Roadway Environment:** The Roadway Environment measure also utilizes the Maintenance Assessment Program. In contrast to measuring the frequency of preventive maintenance completed, observers from a pool of community representatives, outside professionals, and city employees are used to rate the overall quality of care that a roadway receives in relation to such items as litter control, median maintenance and weed control. Observers complete a rating form while conducting an on-site evaluation of various roadways, results are tabulated and an overall score is obtained. Reviews are currently scheduled semiannually.

# **DEPARTMENTS INVOLVED**

Street Maintenance and Medians

#### **BENCHMARK**

**Roadway Service:** At least 90% of work completed on all scheduled maintenance and repair activities.

**Roadway Environment:** 90% of the ratings are at or above 7 on a 10-point scale (1 being the lowest and 10 being the highest).

# **RESULTS**

**Roadway Service:** In fiscal year 2004-05, the data collection process in Street Maintenance was not fully implemented. The portions that were tracked this fiscal year were taken from the Hansen work order system.

# Street Striping

Work Activity *	Benchmark	2003-04 completed %	2004-05 completed %
Line Striping – Major & Prime	90		76.4%
Line Striping – Other Arterials	90	94.8%	159.8%
Crosswalks & Stop Bars (painted)	90	125.2%	133.9%
Pavement Messages (painted)	90	78.4%	65.9%
Curb & Bull Nose	90	82.0%	62.5%

<sup>\*</sup> Striping Standard: All Primes and Majors and school zones striped annually; all other streets every two years. Replace all thermoplastic markings every 7 years.

# Signal Lights

Description	Benchmark	Result 2004-05	
% of days on Recall	1%	0.26%	

# Street Lights

Description	Benchmark	Result 2004-05	
Repair Response within 10 days	90%	88%	

# Sidewalk Repairs

		Result 2004-05
Measure	Benchmark	
% of high priority repairs completed		
within 30 days	90%	82.8%
% of medium priority repairs		
completed within 60 days	90%	61.7%
% of all repairs completed within 100		
days	90%	76.4%

**Roadway Environment:** The following table identifies the percent of responses from each assessment of the City's roadway environment greater than or equal to 7:

Evaluation Date:	Litter Control	Median Maintenance	Weed Control	Overall rating
Benchmark	90%	90%	90%	90%
May 5, 2004	97%	100%	87%	95%
Nov. 18,				
2004	88%	96%	100%	94%
May 26,				
2005	88%	75%	100%	88%
Oct. 20,				
2005	89%	96%	92%	93%

#### ANALYSIS

**Roadway Service:** This measure utilizes the Hasen Work order system to track and measure the level of achievement for scheduled maintenance activities as follows:

Street Striping: The Street Maintenance Division currently uses a crew of four maintenance workers to conduct street striping activities for the City. The results of how much scheduled maintenance was completed in the 2004-05 fiscal year show a great variation between work activities. The striping of Majors and Primes show a completion rate of 76.4%, which is below the benchmark of 90%. The striping of other arterials and painting of crosswalks and stop bars exceeded 100% completion due to the fact that more than the targeted annual amount of these items was painted during the last fiscal year. The striping program is not clearly defined and the current work plan the striping team follows is not linked to the measure to achieve the 90% benchmark goal. A work plan is in process to attempt to create a schedule for

striping work in the City and then link that plan to the measurement process. Steps will also need to be conducted to ensure the data entered is accurate.

**Traffic Signals:** Having functioning signal lights at intersections are crucial to maintain safety and traffic flow. City staff provides overall coordination and minor repair work of signal lights with contracted staff conducting preventative maintenance and major repairs.

Lights that are on "Recall" are often cited as taking too long to change, so a tracking measure was developed to determine how many days signal lights in the city were in the "Recall" state. The 2004-05 results of this tracking resulted in the discovery that the City had 1,334 days that signal lights were on "recall". This involved a total of 10 signal lights of the 142 currently in the City inventory. When compared to the 51,830 (365 days x 142 lights) total number of days that signal lights could be functioning properly, City signal lights were on "Recall" 0.26% of the time. The signals were in "Recall" almost entirely because of road construction issues. This construction includes the installation of reclaimed water piping or road widening and causes the under pavement loops to be damaged. It is normal City practice to wait to replace the loops until the construction project is over which leaves the lights needing to stay in the "Recall" status until that point.

**Street Lights:** Service requests received for bulb or sensor replacement were repaired within 10 days 88% of the time last fiscal year. Items that require power repair require a joint meeting with the utility company and due to scheduling can be delayed beyond the 10-day benchmark.

**Sidewalk Repairs:** The Streets department contracts out the majority of the low and medium priority service requests and complete the high and emergency items with City staff. The contracting process has historically delayed the work time to completion, which in turn causes a drop in the amount of service requests completed within the benchmark time.

**Roadway Environment:** The raters were asked to respond to a total of 3 questions, one each relating to Litter Control, Median Maintenance and Weed Control. Each question required the rater to provide a rating from 1 to 10 (1 being poor, 10 being excellent). The goal was to receive a 7 or higher on 90% of the ratings. Any questions that were left blank or were not applicable to the particular street were excluded from the total.

Median Maintenance saw a large increase between the spring and fall assessments in 2005, from 75% in the spring to 96% in the fall. This was predominantly due to the time of year the review took place, the medians also had time to recover from the winter storms of January and March by the time the Fall survey occurred.

## **ACTION PLAN**

- Data on progress toward completing scheduled maintenance activities will be reviewed on a regular basis to ensure maintenance goals are achieved.
- Staff will use information obtained from partner agencies to establish standards and best business practices for each activity. This information will be used to analyze and compare work being conducted by city crews during the coming fiscal year.

## Roadway Service:

# Striping

- Develop and implement a proactive striping program that balances the use of in-house staff with outside contractors.
- Award thermoplastic contract to overlay painted legends In order to reduce the number of areas requiring annual repainting.

# Traffic Signals

• Two new measures have been developed; staff will be trained on the proper tracking and entry of the information into the Hansen work order system so that results can be reported in next year's State of Effectiveness Report

# Street Lighting

• A second measure has been developed; staff will be trained on the proper tracking and entry of the information into the Hansen work order system so that results can be reported in next Years State of Effectiveness Report.

# Sidewalk Repairs

- Work with Streets staff to ensure Hansen entering and closing of work orders is timely.
- Ensure curb, gutter and sidewalk concrete contract is created every six months to ensure long-term repairs can be completed

## Signage

• There will also be several MAP measures for tracking response times for sign knockdowns of both Priority and Secondary signs. Data will also be collected over the course of this fiscal year to create a benchmark for response times to high priority and regular work orders from Transportation Engineering. The data for these measures will be tracked in the Hansen Work Management System.

# Roadway Environment:

• Results will be analyzed and compared against the established benchmarks. If scores are below expectations, procedural changes and/or corrective action will be taken.

## POINT OF CONTACT

Thomas Moore, Facilities and Streets Superintendent (760) 434-2939, Tmoor@ci.carlsbad.ca.us.

## ROADWAY COST EFFICIENCY

#### THE OUTCOME

High quality roadway experience.

## THE MEASUREMENT

Actual street maintenance, traffic signals and street lighting expenses per lanemile of roadway.

## WHAT THE DATA MEANS

Measures the use of tax dollars allocated for the City's roadways and the relative change per year in expenditures.

## **DEPARTMENTS INVOLVED**

Maintenance and Operations/Street Maintenance, Engineering

## **BENCHMARK**

The 2005 City of Carlsbad maintenance cost per lane-mile benchmark will be set at \$5,480 per lane-mile. The benchmark was established based on information reported in the baseline year (2003) and has been adjusted by the San Diego Consumer Price Index (2004 = 3.7% and 2005 = 3.3%).

## RESULTS

Carlsbad	2003	2004	2005
Maintenance Costs	\$3,724,147	\$4,014,412	\$4,028,523
Total Lane-Miles	728	734	826
\$/Lane-Mile	\$5,116	\$5,469	\$4,877
Benchmark	\$5,116	\$5,305	\$5,480

#### **ANALYSIS**

Annual Roadway Costs: The City's roadway inventory has increased due to the development of several large projects and subsequent acceptance of their related road projects into the City's inventory. These projects include Bressi Ranch, La Costa Greens and La Costa Oaks amongst others. While these additional roadways represent a significant addition in total lane-miles, they have not yet had an impact on overall programs costs. Consequently for 2005, the results show that expenditures in Carlsbad decreased from the previous year by \$592 per lane-mile. This represents a 10.8% decrease from the prior year. This is lower than the benchmark by \$603 per lane-mile. Total maintenance spending for 2005 was only \$14,111 more than 2004 but total

lane miles increased by 92 miles. The total increase in lane miles between 2004 and 2005 represented a 12.5% increase to the streets inventory, and while it did not have a corresponding increase on the budget this year, it is expected that it will have a significant impact in upcoming years.

Current maintenance expenditures are running very close to budget. This is concerning as past budgets have not grown at the same pace as development. There is a concern that as the City grows larger and adds more roads, streetlights, and signals, and more of these items begin to breakdown and need routine maintenance and repair, that the Streets maintenance workload will exceed the annual block budget appropriations. With a 12.5% increase in the streets inventory, it is only a matter of time until a corresponding increase in maintenance and repair costs begin to be incurred. It is a reasonable expectation that costs will escalate for newly acquired roads on a yearly basis over the first few years after implementation. Routine maintenance will begin within the first year, while repairs due to road usage will build on a more gradual basis. When this occurs there will be pressure to defer maintenance to fit within the block budget provided. It will be very important going forward that the amount of maintenance that the city should do each year is measured and quantified so that the annual streets budget will be sufficient to properly maintain the City's streets.

As the City grows, there are many opportunities to look for efficiencies in doing business. In FY 2004 a study was conducted to compare the cost of striping the city streets with contracted versus City staff. The results of this study showed that costs between these two groups were almost identical. These results determined that future city striping would remain a City staff function with contracting out of specialized tasks such as Thermoplasting being pursued. Thermoplasting of legends and crosswalk bars will last seven years without requiring repainting is a proven time and cost savings to the City. Thermoplasting requires equipment that the City does not have so a contract will be pursed in the later half of the 2005 fiscal year. A striping schedule to determine the time it takes the striping crew to stripe the City streets, complete engineering work orders, remove graffiti, and remove algae is being developed to ensure that the existing City crew can accomplish its core tasks of striping and engineering work order completion.

Battery back up systems are being installed in many City signal lights to allow for flash functioning during power outages. This will reduce City staff and contractor call outs to monitor and reset these intersections as well as make City intersections safer during these power outages.

The curb, gutter, and sidewalk repair work the Streets department is responsible for is being conducted using a series of contracts to repair the damaged areas. These contracts are used to supplement the City's streets crews to allow for the large volume of this work to be completed in a timely manner.

**Benchmark Partner Comparison** 

Agency FY 2005	Maintenance Costs	Total Lane- Miles	\$/Lane-Mile
Chula Vista	\$4,956,587	937	\$4,956
San Diego County City	\$2,362,160	300	\$7,874
San Marcos	\$2,461,000	494	\$4,982
Carlsbad	\$4,028,523	826	\$4,877

## Benchmark partner comparison

When staff evaluated the data that was collected from partner agencies it was noted that each agency had a different configuration of workload that was encompassed within the designation of "Streets Department." Interestingly the costs per lane mile results were very similar between Chula Vista, San Marcos and Carlsbad.

## **ACTION PLAN**

- In conjunction with the Finance Department, develop an annual maintenance budget for the Streets department to ensure that proactive maintenance schedules can be implemented.
- Refine the budget process to ensure the annual street maintenance budget is adequately funded to ensure street maintenance budget accompanies the transfer of new street mileage inventory to the streets department. This is necessary to maintain this new inventory according to existing standards.
- Continue determining the best balance between staff and contractors for completion of striping and the curb, gutter, and sidewalk work.

## POINT OF CONTACT

Thomas Moore, Facilities and Streets Superintendent (760) 434-2939.

## ROADWAY SAFETY

#### THE OUTCOME

Roadway safety.

## THE MEASUREMENT

Collision rate per million vehicle miles.

#### WHAT THE DATA MEANS

Many factors contribute to a safe roadway system including design, maintenance, traffic operations, and traffic enforcement. However, the experience, expertise, attentiveness and potential degree of impairment of drivers have a significant impact on roadway safety. This measurement brings the effectiveness of all these factors, excluding the driver, together to measure the safety outcome. Data is currently measured by both engineering and police. Data is gathered throughout the year and is summarized in the Engineering Department, Transportation Division's Annual Traffic Report.

The roadway segment collision rate is the number of collisions occurring on a defined section of road, per one million vehicle miles. The California Department of Transportation has calculated statewide average collision rates on all State highways to be used to identify potential problem areas. These rates are reported for roadways with two to three lanes to undivided roadways with four or more lanes.

## CARLSBAD STREET CLASSIFICATIONS STUDIED

**Prime Arterial:** >40,000 vehicles per day; six lanes; divided; access controlled; provides regional and intra-city circulation; provides connections to the freeways.

*Major Arterial*: 20-40,000 vehicles per day; four lanes; divided; access controlled; provides intra-city circulation; provides connections to the freeways.

**Secondary Arterial**: 10-20,000 vehicles per day; four lanes, striped median; moves traffic between collector and larger arterial streets.

## DEPARTMENTS INVOLVED

Public Works Maintenance and Operations, Public Works Engineering, and Police Departments. .

## **BENCHMARK**

100% of road segments meet Caltrans collision rates by type of segment.

## **RESULTS**

# Roadway Segments Within Caltrans Collision Rates

ROADWAY SEGMENT TYPE	Benchmark	1999¹	20002	20012	2002³	2003³	20044
Secondary Arterials	100%	88%	886%	100%	79%	79%	71%
Major Arterials	100%	100%	100%	100%	77%	77%	79%
Prime Arterials	100%	95%	95%	95%	90%	95%	95%
Total Road Segments within Caltrans collision rates:	100%	95%	95%	98%	82%	85%	83%

- 1 ~ 8 secondary, 11 major, and 19 prime arterial segments.
- 2 ~ 7 secondary, 11 major, and 18 prime arterial segments.
- 3 ~ 14 secondary, 13 major, and 19 prime arterial segments.
- 4 ~ 14 secondary, 14 major, and 19 prime arterial segments.

## **ANALYSIS**

In 2004, 83% of the roadway segments measured were within the statewide collision rate. In 2004 there was one additional roadway segment that was measured in 2004 and not in 2003, there was a 2.1% increase in roadway segments measuring within the statewide collision rate for safety.

The roadway segments below did not meet the statewide collision rate:

- Carlsbad Boulevard from North City Limits to Mountain View Drive
- Carlsbad Boulevard from Mountain View Drive to Carlsbad Village Drive
- Carlsbad Boulevard from Tierra Del Oro Street to Palomar Airport Road
- Carlsbad Village Drive from Carlsbad Boulevard to Harding Street
- Carlsbad Village Drive from Harding Street to Pio Pico Drive
- La Costa Avenue from Rancho Santa Fe Road to Camino de los Coches
- Palomar Airport Road from Avenida Encinas to Paseo del Norte
- Paseo Del Norte from Cannon Road to Palomar Airport Road

The Carlsbad Village Drive segments from Carlsbad Boulevard to Harding Street and from Harding Street to Pio Pico Drive are laden with driveway entrances and exits serving businesses. The short distance between these driveways introduces traffic conflicts and significantly increases the starting and stopping of vehicles allowing motorists to enter into traffic flow. This roadway environment requires extra attention and safety precautions by motorists.

The segments of Carlsbad Boulevard from North City limits to Palomar Airport Road are parallel to the I-5 Freeway and to the Pacific Ocean. Congestion or the occurrence of incidents often causes traffic diversion from the freeway to Carlsbad Boulevard. This increase in volume may be a contributing factor to

the number of collisions on the corridor. The high number of pedestrians and bicyclists may also be a factor due to driver distraction.

The segment of Palomar Airport Road from Avenida Encinas to Paseo Del Norte features very high traffic volumes due to the proximity to the I-5 Freeway on and off ramps. It also features closely spaced intersections and numerous business driveways. These factors and driver inattention may contribute to collisions on the segment.

The segments between North City Limits to Mountain View Drive and Mountain View Drive to Carlsbad Village Drive continue to be heavily traveled corridors. Driver inattention in both of these corridors is a contributing factor in the number of collisions. The segment of Carlsbad Boulevard from the North City limits to Mountain View Drive is a thirty-five (35) mile per hour segment in Carlsbad. Drivers often are inattentive and make unsafe lane changes or attempt U-turn actions inappropriately.

The segment of Paseo Del Norte and Cannon Road to Palomar Airport Road has numerous driveways serving commercial and retail establishments. Drivers' inattention and excessive speed contribute to many of the collisions.

The segment of La Costa Avenue from Rancho Santa Fe Road to Camino Del Los Coches is a short segment serving a commercial development and residential development. Parking is permitted on the south side only. The road transitions in an eastbound direction from four lanes to two lanes. The road is used by high school drivers attending La Costa Canyon High School, residents in single-family homes south of Camino De Los Coches, and visitors of Stagecoach Park. This segment has relatively low traffic volumes that result in a high collision rate when several collisions occur. The collisions follow no ongoing repetitive pattern.

Each of these segments is in a heavily traveled corridor. The segment on Carlsbad Village Drive is particularly problematic due to closely spaced intersections, many driveways, heavy pedestrian volumes and tourist destinations.

The number of collisions has remained steady along many of the roadway segments compared to last year's numbers. City staff monitors collision reports on an individual basis as well as performing trend analysis to determine possible collision patterns. Some of the City's analysis and action to improve safety at individual roadway segments is addressed in the Annual Traffic Report prepared by the Public Works Transportation Division. Additionally, every two years the city staff reports on traffic signal needs and identifies a priority list of intersections for placement of future traffic signals. Interim measures are implemented when a collision pattern is identified until a permanent solution is attainable.

In 2004, 880 collisions occurred in Carlsbad where a police officer reported to the scene of the accident as compared to 891 in 2003. Also in 2004, 158 collisions were classified as hit and run, which is an increase of 29 collisions compared to 2003 data. Sixty-six traffic collisions were a result of rainy conditions and/or wet roadways or fog during 2004. There were 37 collisions in construction zones, an increase of 23 collisions as compared to 2003 which reflects the significant amount of roadway construction in Carlsbad. Bicyclists were involved in 23 collisions in 2004, which is a 23% decrease over 2003.

2004 was the fourth year the Carlsbad Police Department tracked cell phone usage in a vehicle when a collision occurred. Of the 788 collision reports containing cell phone information, 15 reports listed a cell phone in use by the responsible party. Six hundred and one (601) reports listed a cell phone present, but not in use by the responsible party. The remaining 172 reports indicated no cell phone present.

An intersection collision rate is defined as the number of collisions occurring per one million vehicles entering the intersection. Generally, an intersection is considered to be functioning satisfactorily when the rate is 1.5 or below. All intersections in Carlsbad function with a collision rate of less than 0.75. The intersection that experienced the highest number of collisions in 2004 was El Camino Real at Alga Road/Aviara Parkway. This intersection has a collision rate of 0.34.

## **ACTION PLAN**

In 2004, the number of reported traffic collisions was about the same as the previous year. As traffic volumes continue to grow, the trend expected is for the number of traffic collisions to also increase. Correspondingly, there will be an ongoing emphasis on advanced planning, surveillance of existing conditions, performance measurement, a continued high level of Police Department traffic enforcement, and a well developed Capital Improvement Program (C.I.P.) to help counter any increase in the number of collisions that occur in Carlsbad. As a result, the goal of a safe and efficient transportation system in Carlsbad can be achieved and these efforts will help maintain the balance between growth, accessibility to parcels of land and mobility.

A large number of the primary collision factors that result in collisions are outside the control of the City. Therefore, initiating preventive measures can be difficult due to the nature of the accidents/collisions (weather or driver inattention.) Almost all Carlsbad Village Drive and all Carlsbad street segments have been fully improved to city standards, including permanent signing and striping with traffic control devices in place. However, it is expected that all roadway segments could meet the benchmark of falling below within the Caltrans collision rates, and Westaff will continue to strive for this result.

Staff currently monitors and consistently addresses safety needs along roadway segments where the number of collisions increases significantly or a pattern of collisions is identified. Solutions are identified and interim measures are implemented when needed unless a permanent solution is immediately attainable. Permanent solutions are typically developed with design and construction funding included as part of the annual capital improvement program.

## POINT OF CONTACT

Bob Johnson (760) 602-2752, Bjohn@ci.carlsbad.ca.us.

## ROADWAY CIRCULATION

#### THE OUTCOME

Roadway circulation efficiency.

## THE MEASUREMENT

Average travel time on El Camino Real and Palomar Airport Road.

Travel time studies are conducted at least twice each year on these roadways on a regular basis by staff in the Transportation Division since June of 2000. The purpose of these studies is to compare performance measurement benchmarks for roadway circulation in the City. These studies are conducted once in June and again in December.

The travel time study on El Camino Real was performed for the full length of the roadway in the City of Carlsbad, from the south city limit to Haymar Drive at the north city limit. During each travel time study, three time periods were evaluated. These were 7:00 a.m. to 9:00 a.m. (the a.m. peak period), 9:15 a.m. to 11:15 a.m. (the off-peak period), and 3:30 p.m. to 6:00 p.m. (the p.m. peak period).

The travel time study on Palomar Airport Road was performed for the full length of the roadway in the City of Carlsbad, from Carlsbad Boulevard at the west to the east city limit. During each travel time study, three time periods were evaluated. These were 6:45 a.m. to 8:15 a.m. (the a.m. peak period), 9:45 a.m. to 11:15 a.m. (the off-peak period), and 4:00 p.m. to 6:00 p.m. (the p.m. peak period).

Two test vehicles are used to conduct travel time studies. The "average-speed" technique is used, which involves driving the test vehicles along the length of the test section at a speed that represents the average speed of the traffic stream. During each of the a.m. peak, off-peak and p.m. peak study periods, each vehicle makes as many runs as can occur during the time frame measured.

## WHAT THE DATA MEANS

<u>Palomar Airport Road (East City Limit to Carlsbad Blvd)</u>
 Ideal Travel Time (Eastbound or Westbound)

7 min, 21 sec

• <u>El Camino Real (South City Limit to Haymar)</u> Ideal Travel Time (Northbound or Southbound)

10 min, 53 sec

*Ideal Travel Time* is the length of time that it takes to travel from one point to the other based on the posted speed limit assuming no delays for traffic signals, construction, pedestrians, traffic congestion, etc.

**Average Travel Time** is the average of actual travel times from one point to the other, including delays. Average travel time is most meaningful if reviewed in relationship to peak and off-peak periods (morning commute/evening commute). Several factors contribute to an efficient roadway circulation system including design, maintenance, traffic operations, and police enforcement. These measures can serve as an initial red flag to help determine the effectiveness of the City's roadway system to ensure efficient and time-effective travel.

#### DEPARTMENTS INVOLVED

Public Works Maintenance and Operations, Public Works Engineering, Police.

## **BENCHMARK**

Travel times on El Camino Real and Palomar Airport Road will not exceed baseline rates collected in June 2000.

## RESULTS

El Camino Real Average Travel Times in Minutes\*

	Bench- mark	Dec. 2002	Jan 2003	June 2003	Dec 2003	June 2004	June 2005	% Change Benchmark to June '05
A.M. Peak -7:00-9:00			ĺ					
Northbound – South. City Limit to Haymar	15.7	18.3	16.0	17.2	16.5	17.6	16.8	+7.0
Southbound – Haymar to South City Limit	18.0	20.1	17.4	17.1	20.3	21.2	20.0	+11.0
Off Peak -9:15-11:15								
Northbound – South City Limit to Haymar	15.8	17.4	12.9	16.2	16.3	17.0	17.1	+8.3
Southbound – Haymar to South City Limit	16.0	18.3	14.9	16.5	16.6	16.3	19.1	+19.4
P.M. Peak - 3:30 to 6:00								
Northbound – South City Limit to Haymar	21.8	34.0	21.7	25.4	22.3	22.5	21.3	-2.3
Southbound – Haymar to South City Limit	17.4	19.4	16.7	17.8	17.5	20.0	19.8	+13.8

<sup>\*</sup>Benchmarks were established from June 2000 Travel Time Studies

<sup>\*</sup>The Percent Change From Benchmark represents the change from the original benchmark established in June 2000 to June 2005

# Palomar Airport Road Average Travel Times in Minutes\*

		Dec.	Jan	June	Dec.	June	June	% Change from
	Benchmark	2002	2003	2003	2003	2004	2005	Benchmark
A.M. Peak -6:45-8:15								
Eastbound – Carlsbad Blvd to East City Limit	11	11	12	12	11	12	13	+12
Westbound – East City Limit to Carlsbad Blvd	11	11	10	12	11	13	11	-4
Off Peak-9:45-11:15								
Eastbound – Carlsbad Blvd to East City Limit	11	11	9	12	10	12	11	+5
Westbound – East City Limit to Carlsbad Blvd	10	10	8	11	11	10	10	+4
P.M. Peak-4:00-6:00								
Eastbound – Carlsbad Blvd to East City Limit	14	12	11	12	13	13	13	-5
Westbound – East City Limit to Carlsbad Blvd	12	12	11	12	11	12	12	+2

<sup>\*</sup>Benchmarks were established from June 2000 Travel Time Studies

## **ANALYSIS**

Staff obtained the average travel time information on both roads based upon roadway conditions on the day of the study. Both roads are future six-lane arterials. However, some segments have only been constructed with two-lanes in each direction. Travel times on both segments are influenced by traffic volumes, roadway geometrics, driveway locations, traffic signals, the regional mall, pedestrian volumes, and lane closures due to construction. The presence of several major construction projects may have contributed to the increase of off-peak travel times and volumes. Afternoon peak hour delays are significantly higher due to the rising volume of traffic on both the subject roads and side streets at that time of day.

Traffic volumes have steadily increased on El Camino Real and Palomar Airport Road in recent years. Increases in traffic volume can lead to increases in travel times due to more vehicles in the traffic stream, less maneuverability and more congestion. Both roadways have experienced increased travel times in

<sup>\*</sup>The Percent Change From Benchmark represents the change from the original benchmark established in June 2000 to June 2005

conjunction with the increased traffic volumes. A slight decrease was seen in certain portions of El Camino Real and Palomar Airport Road.

Traffic Volumes, El Camino Real

	Traffic Vo	Traffic Volume ADT		
Location	2000	2005		
Between S.R. 78 and Plaza Drive	49,449	44,123	-11%	
Between Faraday Avenue and Palomar Airport Road	32,488	35,659	+10%	
Between Levante Street and Calle Barcelona	30,085	35,169	+17%	

Traffic Volumes, Palomar Airport Road

-	Traffic Vo	% Change	
Location	2000	2005	
Between I-5 S/B Ramp and I-5 N/B	38,437	38,217	6%
Ramp			
Between El Camino Real and El Fuerte	47,968	51,278	+7%
Street			
Between Melrose Drive and Paseo	47,873	49,487	+3%
Valindo			

**El Camino Real:** The ideal travel time is 10 minutes, 53 seconds on El Camino Real. In general, travel times on El Camino Real have increased. This is in line with the overall increase in traffic volumes on El Camino Real from year to year. A notable exception is the decrease in travel times on northbound El Camino Real during the p.m. peak period over the past two years. This is probably the result of the restriping project that added an additional through lane on El Camino Real over the SR78 Bridge by the City of Oceanside in 2003 and general construction impacts.

Immediate improvements to travel times on El Camino Real were noted with the implementation of peak-hour time-based signal coordination plans in 2003 for the entire length of El Camino Real. Since then, changes in vehicle volumes and construction impacts at various intersections along the corridor have resulted in some intersections being removed from the coordination plan on a temporary basis. This may account for some of the increases to travel times on El Camino Real.

The major traffic delays occur at the intersections of Palomar Airport Road, La Costa Avenue, Tamarack Avenue, Faraday Avenue and Alga Road during the a.m. peak period. During the p.m. peak periods, major traffic congestion occurs at the intersections of La Costa Avenue, Faraday Avenue, Alga Road, Marron Road, and Cannon Road. The major traffic delays occur at the intersections of Calle Barcelona, La Costa Avenue, Palomar Airport Road, and Marron Road during the off peak periods.

The opening of the College Boulevard/Cannon Road extension in August 2004 resulted in a noticeable reduction of traffic volumes on El Camino Real. The shift in traffic volumes that results in fewer vehicles on El Camino Real has improved travel times.

**Palomar Airport Road:** The ideal travel time is 7 minutes, 21 seconds on Palomar Airport Road. In general, travel times on Palomar Airport Road have increased but were found to be within the ranges established by previous studies. As was the case with El Camino Real, travel times on Palomar Airport Road have also increased in conjunction with increases in traffic volume. A notable exception is the decrease in travel times for the westbound direction during the a.m. peak period, which may be the result of the newly added third westbound lane between the east City limits and Melrose drive.

As noted previously, signals pulled off of the signal coordination plan due to volume changes and construction affect peak hour travel and may have contributed to the increases in travel times.

The major traffic delays occur at the intersections of eastbound Palomar Airport Road where Yarrow Drive, El Camino Real and El Fuerte intersect and on westbound Palomar Airport Road at the intersections of El Fuerte Street, El Camino and College Boulevard during the a.m. peak period. During the p.m. peak periods, major traffic congestion occurs on eastbound Palomar Airport Road where Armanda Drive and El Camino Real intersect and on westbound Palomar Airport Road at the intersections of El Camino Real Armanda Drive and Paseo Del Norte.

#### **ACTION PLAN**

Both Palomar Airport Road and El Camino Real are required to be completed to their full arterial width per the Circulation Element of the General Plan. Completion of other missing circulation element roadways and widening existing segments will help distribute traffic volumes to more lanes resulting in shorter platoons of vehicles traveling between intersections. Portions of both segments have traffic signals operating in coordination due to the closely spaced intersections. Additional traffic signals will be constructed on both El Camino Real and possibly on Palomar Airport Road in the future. At that time, intersection spacing will be closer and will benefit from coordinated traffic signals. The city has plans to construct a Transportation Management Center (TMC) in the future Public Works building to monitor and coordinate timing of traffic signals. At this time it is unknown when funding for the TMC will be appropriated. The opening of the College Boulevard/ Cannon Road extension in August 2004 resulted in a noticeable reduction of traffic volumes on El Camino Real. Roadway impacts will be analyzed after the December 2005 travel time study has been performed. Completing construction related impacts on Palomar Airport Road east of El Camino Real should also help improve travel times.

The projected completion, in 2006, of Faraday Avenue and Melrose Drive should divert traffic volume from El Camino Real and Palomar Airport Road and improve travel times. Poinsettia Lane Reach "E" could be completed in a three to five year timeframe by private development and would further reduce traffic volume on Palomar Airport Road. Similarly, the widening of sections of El Camino Real and Palomar Airport Road, which have not yet been built to ultimate width to three lanes in each direction, should improve travel times by increasing capacity and eliminating operational bottlenecks.

Additional travel time studies will be performed on El Camino Real and Palomar Airport Road in December 2005. The results from these studies will enable continued comparisons to be made with the results contained in this and previous studies in order to evaluate trends resulting from traffic improvements or delays on both roadways.

## POINT OF CONTACT

Bob Johnson (760) 602-2752, Bjohn@ci.carlsbad.ca.us.

## ROADWAY RELIABILITY

#### THE OUTCOME

High quality roadway experience.

## THE MEASUREMENT

Overall Roadway Condition Index (OCI)

The OCI includes a target of 100% of roadways achieving a minimum score of 70 or higher. The Pavement Management software, based on the data collected during roadway condition surveys, generates OCI values.

## WHAT THE DATA MEANS

The OCI reflects the condition of the roadway surface, which is related to the design and quality of the initial installation, the age, and maintenance of the roadways. Exposure to the elements and vehicle loadings cause pavement to deteriorate. Left untreated, the pavement will develop large cracks and potholes that would impact the structural integrity of the road as well as degrade the rideability or "smoothness" of the road. Pavement overlays can prevent cracks from occurring and help avoid more extensive and expensive roadway repairs. A proactive pavement management program is the most cost effective way to improve roadway reliability and protect the City's investment in its roadways.

## **DEPARTMENTS INVOLVED**

Public Works, Engineering and Maintenance and Operations/Street Maintenance

## BENCHMARK

Average OCI of 80 including a target of 100% of roadways scoring a minimum of 70 or higher. An OCI in the range of 70-85 indicates that the roadway is in "very good" condition, which means that the pavement has very few minor defects.

## RESULTS

The following table identifies the OCI values of the City's roadways as of the end of the 2005 calendar year.

Roadway Class	Total Centerline Miles	Benchmark Average OCI	Actual Average OCI	Miles of Roadway Above an OCI of 70	% of Miles Above an OCI of 70
Local	242		92	231	95%
Industrial	14		83	12	88%
Collector	4		84	3	80%
Secondary Arterial	29		88	26	89%
Major Arterial	26		91	25	98%
Prime Arterial	24		87	22	91%
City Wide	339	80	90	319	94%

## **ANALYSIS**

The results reflect the construction of the 2005 Management Program projects and the addition of approximately 11.1 miles of new roadways. The Pavement Management Program projects resulted in 17.0 miles of roadways being sealed and 10.6 miles of roadways receiving an overlay. The combined cost of the Pavement Management Program projects was \$3,400,000. As a result of these activities, the City Wide OCI value increased from 88.5 to 89.9.

The following table summarizes the OCI values and construction costs noted above. This table demonstrates the correlation between the funds expended on pavement management activities and the City Wide OCI values.

Year	Expenditures on Pavement Mgmt. Projects	Average OCI (System Wide)	Miles of Roadway below an OCI of 70% of miles below an OCI of 70	
1998	N/A	75	N/A	
2002	\$2,830,000	83	53 miles / 16%	
2003	\$2,935,000	84	50 miles / 15%	
2004	\$8,315,000	89	27 miles / 8%	
2005-1 *	\$3,400,000	89	20 miles / 6%	
2005-2 **	\$ O	90	20 miles /6%	

<sup>\*2005-1-</sup> represents the results calculated by updating the last year's roadway inventory with the new OCI values after the 2005 Pavement Management Program projects are constructed.

## **ACTION PLAN**

Utilize the Pavement Management software program to analyze the cost and effectiveness of various management philosophies. The variables that will be evaluated include budget, minimum OCI values and the various types of pavement management construction tasks. Upon the completion of the analysis, the activities for next year will include identifying the scope of work for future projects, design and construction.

## POINT OF CONTACT

Marshall Plantz (760) 602-2766, Mplan@ci.carlsbad.ca.us.

<sup>\*\*2005-2-</sup>represents the results of the 2005 Pavement Management Program projects and the new roadways that have been constructed in the last year.

## TRANSPORTATION CUSTOMER SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction.

## THE MEASUREMENT

City of Carlsbad Public Opinion Survey.

#### WHAT THE DATA MEANS

Highly satisfied customers are an indication that we are providing services in a manner that is desired and/or expected, contributing greater confidence in the Engineering Transportation Division and local government in general, resulting in high quality of life for community members.

## **DEPARTMENTS INVOLVED**

Engineering/Transportation and Design Divisions, and Maintenance and Operations/Construction Maintenance.

## **BENCHMARK**

90% of customers rate the condition of city streets and traffic circulation as "Good" or "Excellent."

## **RESULTS**

## **Condition of City Streets**

Benchmark	2000	2001	2002	2003	2004	2005
90%	80%	84%	83%	83%	73%	64%

## **Traffic Circulation**

Benchmark	2000	2001	2002	2003	2004	2005
90%	41%	45%	46%	44%	44%	N/A

#### ANALYSIS

Carlsbad residents were asked about the condition of city streets. Overall conditions are rated positively with 13% of respondents giving a rating of "Excellent" and 53% as "Good."

This year, the Condition of City Streets rating experienced a decrease in reported customer satisfaction over previous years. One factor that may be contributing to this decrease is that the City is in a significant construction period that results in many lane closures and/or traffic delays in many parts of the City. There is especially heavy construction in the south part of the City,

which results in many of the roads to be impacted by traffic control plans that reduce roadway capacity during construction.

The rating of road condition was analyzed to look for differences between demographic groups. Significant differences were found in the ratings given to road conditions depending upon the quadrant in which the respondent lived. "Excellent" ratings were given much more often by residents of the Southwest quadrant (18.6%) and much less often by residents of the Northwest quadrant (8.5%). Poor ratings were given most often by residents of the Southeast quadrant. Explanations for these differences may be related to ongoing construction projects in specific areas (e.g. Rancho Santa Fe Road widening in the Southeast quadrant) or consistently congested roadways (e.g. SR-78 and I-5 interchanges in the Northern quadrants).

Length of residence was also significantly related to ratings of road conditions. In general respondents who have lived in the City of Carlsbad longer were less likely to give positive ratings and more likely to give negative ratings.

The customer service rating for traffic circulation has been constant for a number of years, and there is no anticipated change in the service levels. Therefore, it was determined that this question would be asked only in alternating years.

## **ACTION PLAN**

Continue to include transportation related questions in the citywide Public Opinion Survey. In addition, explore the possibility of adding open-ended questions to explore reasons why residents rate traffic circulation and road conditions low.

With the completion of construction projects this year and the anticipated opening of several major thoroughfares within the next several years, satisfaction with traffic circulation by region will be carefully monitored.

## POINT OF CONTACT

Bob Johnson, Deputy City Engineer, Transportation Division, Engineering, (760) 602-2752, <u>Bjohn@ci.carlsbad.ca.us</u>.

## GROWTH MANAGEMENT CIRCULATION

#### THE OUTCOME

An efficient and effective circulation system is maintained in the City.

## THE MEASUREMENT

No road segment or intersection within neither the City, nor any road segment or intersection outside the City (which is impacted by development within the City), shall be projected to exceed an unacceptable Level Of Service (LOS).

## WHAT THE DATA MEANS

Comparison of traffic volumes to roadway and intersection capacities. The City of Carlsbad's combined North County Series 10 traffic model is maintained by SANDAG and used by staff to identify necessary roadway and intersection improvements based upon future traffic projections through the year 2030. The City of Carlsbad Annual Growth Management Traffic Monitoring Program conducts traffic counts of existing volumes and analyzes LOS conditions on critical roadways and intersections throughout the City. Both programs help identify and determine the timing of additional traffic mitigation and circulation improvements.

LOS is a quantative measure of traffic conditions that reflects how restrictive vehicle movements are, or may become. For purposes of monitoring traffic throughout the City, the capacity of an intersection or roadway segment is compared to the actual volumes measured in the field. The six levels of traffic service range from A to F. Level A represents the most ideal conditions; Level E is at capacity; and Level F indicates forced flow, or stop and go traffic representing a gridlock condition. The Transportation Research Board Highway Capacity Manual further defines LOS based on specific measurements of traffic volumes and roadway capacities.

## **DEPARTMENTS INVOLVED**

Engineering.

## **GROWTH MANAGEMENT STANDARD**

No road segment or intersection in the City, nor any road segment or intersection outside the City (which is impacted by development in the City), shall be projected to exceed a service level as indicated for the following conditions:

Condition	LOS
During off-peak hours	С
During peak hours	D

## RESULTS

The Growth Management Traffic Monitoring Program for 2005 included 31 roadway segments and 60 intersections. Results indicate all roadway segments and intersections meet the Growth Management Circulation Standard.

Although traffic volumes grew in some locations of the City between 2004 and 2005, other locations have seen slight traffic volume decreases. Street improvements and alternative routes have been implemented which resulted in improved LOS at many of the city's intersections and roadways. During the past year, the city had completed the construction of major circulation element roadways such as the College Boulevard/Cannon Road extensions, the completion of Poinsettia Lane between Melrose Drive and El Camino Real, El Fuerte Drive between Poinsettia Lane and El Camino Real, and the widening of the intersection of Palomar Airport Road and Melrose Drive. The resulting construction of these roadways has significantly changed the circulation patterns through the city.

In general, the 2005 Growth Management Traffic Monitoring Program indicates improved traffic levels of service for various circulation locations when compared to previously reported years. This indicates the number of through lanes and turn lanes provided on major roadways and intersections are generally appropriate for the prevailing traffic conditions. The following intersections and roadway segments, although reaching the peak hour threshold, currently meet the Growth Management Standards and will continue to be monitored:

- El Camino Real/Cannon Road (LOS D in the PM Peak Hour)
- El Camino Real/Palomar Airport Road (LOS D in the PM Peak Hour)
- El Camino Real/Aviara Parkway (LOS D in the PM Peak Hour)
- Carlsbad Boulevard/Cannon Road (LOS D in the PM Peak Hour)
- Cannon Road between El Camino Real and College Boulevard (LOS D in the Peak Hour)

## **ANALYSIS**

The Faraday Avenue and Melrose Drive extension projects are under construction and projected to be completed in fall 2006. Both roadways have the potential to alleviate congestion at the following intersections and roadway segments:

- El Camino Real/Palomar Airport Road intersection
- Palomar Airport Road/Melrose Drive intersection
- Palomar Airport Road between Melrose Drive & Business Park Drive

It should be noted the Palomar Airport Road/Melrose Drive intersection was reported at LOS of E in the 2004 Traffic Monitoring Report. In 2005 it was reported at LOS C. The difference in LOS may be attributed to the day-to-day variation in traffic using Palomar Airport Road as a connector between inland communities and the I-5/coastal corridor, and completion of Poinsettia Lane, a parallel arterial located south of Palomar Airport Road. This intersection will continue to be monitored and the LOS is anticipated to remain the same, or improve, when the Faraday Avenue and Melrose Drive extensions are completed.

Completion of the College Boulevard/Cannon Road extension projects has changed the traffic patterns within the immediate project area. These extension projects now provide a direct connection to SR 78 via the College Boulevard interchange. Prior to this connection, access to SR 78 within the immediate project area was provided at the El Camino Real/SR 78 interchange. The 2005 volumes along El Camino Real between SR 78 and Cannon Road show an average decrease of about seventeen percent. In addition, a significant decrease from the 2004 ADT was calculated along Carlsbad Village Drive and between Pontiac Drive and Victoria Avenue (37% decrease). With a direct connection to SR 78, College Boulevard between Tamarack Avenue and the northern city limits, and Cannon Road between El Camino Real and College Boulevard should continue to be monitored as part of future traffic monitoring programs.

Traffic volume levels along Rancho Santa Fe Road between Melrose Drive and La Costa Avenue have generally remained the same as previous years. The Rancho Santa Fe Road Phase I project between San Elijo Road and La Costa Avenue is complete. The Phase II bridge and new roadway is currently under construction and projected to be completed in the summer of 2006.

Based on the 2005 Carlsbad Traffic Monitoring Program, the Levels of Service (LOS) for Rancho Santa Fe Road and adjoining intersections were found to be:

- Rancho Santa Fe Road and Melrose Drive intersection LOS C in the PM Peak
- Rancho Santa Fe Road and La Costa Avenue intersection LOS B in the AM Peak
- Rancho Santa Fe Road between Melrose Drive and La Costa Meadows LOS C
- Rancho Santa Fe Road between San Elijo Road and Camino Junipero LOS A

When both phases of the Rancho Santa Fe Road Realignment and Widening project are complete, traffic flow and intersection operations in the surrounding area is expected to improve.

Several intersections located on Carlsbad Boulevard are identified in the City's Traffic Impact Fee Report as future hot spots due to their unique character. Hot spots are locations that primarily serve regional traffic and are within limited control of the City. Because the roadway abuts the ocean, most major intersections on Carlsbad Boulevard are "T" intersections that tend to have high turning movement demands. Studies by both the City and SANDAG indicate Carlsbad Boulevard is used by regional traffic as an alternative to I-5.

The following is a summary of the Levels of Services for intersections with Carlsbad Blvd analyzed in the 2005 Carlsbad Traffic Monitoring Program:

	AM	PM
Location	Peak	Peak
Carlsbad Blvd and Carlsbad Village Drive	A	В
Carlsbad Blvd and Tamarack Avenue	A	В
Carlsbad Blvd and Cannon Road	В	D
Carlsbad Blvd and Poinsettia Lane	A	A

The Carlsbad Boulevard/Cannon Road intersection will continue to be monitored with other major intersections located on Carlsbad Boulevard.

The Interstate-5 Interchanges with the Circulation Element roadways in Carlsbad were also analyzed in the 2005 Carlsbad Traffic Monitoring Program. Based on the analysis, each on and off ramp intersection meets the Growth Management Circulation Standard. The freeway ramps will continue to be monitored on an annual basis.

## **ACTION PLAN**

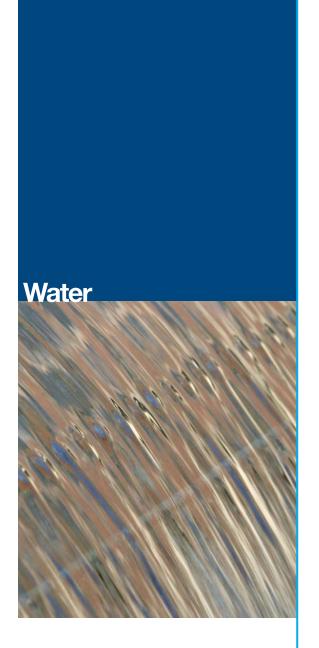
Engineering Department staff recommends the following actions:

- Continue on-going analysis of impacts from new development.
- Continue to conduct annual Growth Management Traffic Monitoring Program.
- Complete construction of Rancho Santa Fe Road Realignment & Widening.
- Complete Melrose Drive/Faraday Avenue connections.
- Complete the spot widening of arterial roadways to their full General Plan configuration to eliminate congestion points and bottlenecks.
- Complete Poinsettia Lane Reach E.
- Consider initiating environmental studies for Cannon Road Reach 4.
- Complete College Boulevard Reach A.

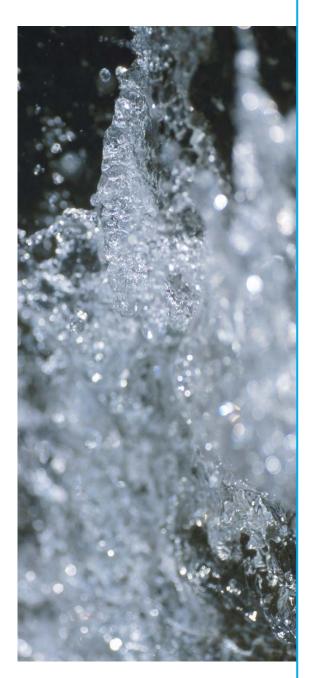
## POINT OF CONACT

Steven Jantz (760) 602-2738, sjant@ci.carlsbad.ca.us





Ensure a reliable, high quality, diversified potable and recycled water system leading to a drought-resistant community, in the most cost effective manner.



# **Water Indicators**

- Potable Water Quality
- Water Service Delivery
- Water Delivery Cost Efficiency
- Water Service Customer Satisfaction
- Recycled Water Service Delivery
- Recycled Water Delivery Cost Efficiency
- Growth Management Standard Water Distribution System

# Goals

- Cathodic Protection Program
- El Camino Real Water Pipeline Improvements
- Water/Sewer System Connection Permits

# **Current Results**

- The City continues to ensure that citizens have a diversified and reliable water supply
- Potable water quality continued to exceed the State's requirements
- The percent of unaccounted for potable water decreased slightly from prior year
- Annual inspections and testing of recycled water use sites exceeded city maintenance standards.
- Customer service ratings remain high
- The costs to maintain the potable water system are within benchmark

#### **PHASE II**

The Phase II recycled water project has five main elements including:

- A 4.0 MGD Carlsbad Water Recycling Facility (advanced tertiary treatment plant)
- A flow equalization facility
- Over 24 miles of pipelines
- Three booster pumping stations
- Improvements to an existing 54 million gallon earthen reservoir (Mahr Reservoir)

The new 4 MGD Carlsbad Water Recycling Facility began construction in August 2002 and final completion occurred in October 2004. The flow equalization facility was a joint venture project with the Encina Wastewater Authority and was completed in November 2005. The pipelines started construction in January 2004 and will be completed April 2006. All pumping stations are under construction and will be completed by August 2006. Mahr Reservoir is under construction and will be completed December 2006.

Initial operation of Phase II facilities is planned to begin in the spring of 2006, and the total system will be operational by the end of 2006.



# Why is it important to Carlsbad?

The health and safety of all who work, live and play in the City of Carlsbad is dependent upon a reliable, high quality supply of water.

Carlsbad is located in an arid region and like most areas in Southern California, currently relies 100% on its supply of water from outside sources. Carlsbad strives to ensure that the water delivered to its customers is a high quality product, distributed in the most cost effective manner, with minimal water losses.

As these sources of water get depleted, it is critical for the City to research alternative methods of obtaining and providing additional sources of water for potable, as well as non-potable (i.e., irrigation, etc.) uses.

# **Trends and Observations**

- Completion of scheduled maintenance activities continued to be below benchmark. Staff continues to analyze alternative work methods to improve the balance of scheduled versus unscheduled work
- As the water system continues to grow through development of the city, the challenges in trying to achieve the balance between scheduled and unscheduled maintenance will continue.
- The percent of lost (i.e., unused) recycled water continues to be high due to the city's obligation to purchase recycled water through take-or-pay contracts. This trend will continue, but will decline over time as existing services are retrofitted over to the recycled water delivery system and more customers become available to utilize the system.



CITY OF CARLSBAD Current and Projected Water Supplies (AFY)						
Water Supply Sources	2000	2005	2010	2015	2020	
Purchased from SDCWA	18,917	20,200	13,475	14,891	17,607	
Desalinated Seawater (a)	0	0	5,000	5,000	5,000	
Recycled Water	1,803	2,000	5,000	6,300	6,300	
Total	20,720	22,200 <sup>(b)</sup>	23,475	26,191	28,907 <sup>(c)</sup>	

- Denotes Carlsbad's option to purchase up to 25,000 acre-feet per year from Poseidon Resources or 5,000 acre-feet from CWA as per the Carlsbad/CWA MOU. (See discussion on Seawater Desalination).
- (b) For calendar year 2005, the estimated demand is projected to be approximately the same as 2004 at 22,000 AFY. Significant rainfall during the months of January through April in 2005 reduced the landscape irrigation water demand.
- (c) Ultimate demand is projected at 28,907 AFY including recycled water

## POTABLE WATER QUALITY

#### THE OUTCOME

High quality water free of pathogenic organisms.

## THE MEASUREMENT

Monthly bacteriological samples.

#### WHAT THE DATA MEANS

Carlsbad purchases treated water from the Metropolitan Water District via the San Diego County Water Authority. Weekly water samples are taken and tested for the presence of coliform bacteria. Coliform bacteria are ever-present and therefore used as an indicator of the potential presence of pathogenic organisms that cause waterborne diseases. Positive samples are indicators of potential problems that are investigated and followed up with additional samples. Monthly bacteriological reports are sent to the State Department of Health Services. The goal is to achieve zero positive samples, with anything less than five percent being acceptable.

## **DEPARTMENTS INVOLVED**

Public Works/Maintenance and Operations.

## **BENCHMARK**

98% of bacteria samples should be free of coliform. The State requires that at least 95% of all samples collected during any month are total coliform-free.

## **RESULTS**

			Total	
	Number	Total	Bacteria-Free	Percent
Fiscal Year	Collected	Positive		Bacteria-Free
	Bench	mark		98%
2001	1,725	3	1,722	99.8
2002	1,719	1	1,718	99.9
2003	1,719	1	1,718	99.9
2004	1,752	1	1,751	99.9
2005	1,724	2	1,722	98.8

## ANALYSIS

Data was gathered for fiscal year 2005. 1,724 samples were taken with two samples testing positive for bacteria. When positive samples are identified, staff takes repeat sample sets per State regulations. Actual results of 99.8% were above standard for this measurement and met all State and Federal legal,

health and safety requirements. Data collected from outside agencies indicated that all maintain compliance with State and Federal regulations. However, the more samples that are taken, the more likely that a positive sample may be found. The minimum number of samples to be collected is based on the number of customers and/or connections being served. This higher level of testing further assures a safe supply of potable water to customers.

## **ACTION PLAN**

To ensure a high level of water quality and safety, staff will continue weekly water sampling and testing in accordance with provisions of the California State Department of Health Services.

## POINT OF CONTACT

Clint Phillips, (760) 438-2722, x 7110, cphil@ci.carlsbad.ca.us.

## WATER SERVICE DELIVERY

#### THE OUTCOME

Water system reliability.

## THE MEASUREMENT

Percent of planned work activities completed during the fiscal year based on a standard of maintenance. These activities include Valve Maintenance and Fire Hydrant Maintenance.

## WHAT THE DATA MEANS

This measure reflects the level of care with which the integrity of the water distribution system is being maintained.

## **DEPARTMENTS INVOLVED**

Maintenance and Operations/Construction Maintenance & Water Operations.

#### **BENCHMARK**

**Valve Maintenance:** At least 90% of all valves in the Carlsbad service area are tested and repaired bi-annually.

**Fire Hydrant Maintenance:** At least 90% of all fire hydrants in the Carlsbad service area are tested and repaired bi-annually.

## RESULTS

		% of Planned Maintenance		
Activity	Benchmark	2003	2004	2005
Valve Maintenance (water				
distribution system)	90%	8%	24%	28%
Fire Hydrant Maintenance	90%	10%	35%	35%

## ANALYSIS

A Public Works Maintenance Assessment Program is used to establish and document the frequency of recommended preventive maintenance and/or responsiveness to repair needs. At the end of each fiscal year, the level of accomplishment is measured by comparing the percent of completed work to planned maintenance. The Public Works Maintenance Management Program and work order systems are used to collect and analyze performance data. The standard for the maintenance activities listed above includes the planned testing and repair of all water system structures and appurtenances to ensure optimal storage, distribution and quality of water in the Carlsbad service area.

The benchmark for each of these activities was set at 90%. Ongoing maintenance at the benchmark level helps maintain the structural integrity of the water distribution system. Maintenance activities usually include the inspection and testing of water system structures.

To more effectively balance planned and corrective maintenance schedules within existing resources, staff will revise the maintenance standard for Valve and Fire Hydrant Maintenance from bi-annual to every four years starting in fiscal year 2006. This will ensure that every water distribution valve and fire hydrant that needs inspection and maintenance will receive attention on a regular basis. Staff will closely monitor the impacts of this schedule change and note any "high priority" needs that may require more frequent attention.

#### **ACTION PLAN**

- Staff will continue to investigate and analyze alternative work methods to improve the balance of planned versus corrective maintenance. This will include, but not be limited to, the use of contract services, temporary help, and/or continued investigation and evaluation of service delivery alternatives using the Public Works Service Plan program, and ongoing review of the impacts of revised maintenance standards.
- In fiscal year 2006, staff will revise the maintenance standard for each water distribution system valve and fire hydrant from bi-annual to every four years.
- In fiscal year 2007 staff will implement a new work management system (Hansen) that will automate scheduling and record maintenance of work activities, and tie maintenance and/or repair work to a specific asset in the water system.

## POINT OF CONTACT

Clint Phillips (760) 438-2722, x7110, cphil@ci.carlsbad.ca.us.

## WATER DELIVERY COST EFFICIENCY

#### THE OUTCOME

Water operations delivery efficiency.

## THE MEASUREMENT

This measure uses a multi-modal approach combining:

**Unaccounted for Water:** The percentage of produced water that fails to reach customers and cannot otherwise be accounted for through authorized use. Unaccounted for water is defined as the amount of water produced (water purchased plus or minus the amount of water held in storage) minus water sold, and divided by water produced.

**Cost of Service:** The total cost of service using actual expenditures, including potable water purchases from the Metropolitan Water District via the San Diego County Water Authority, less depreciation, divided by the total acre-feet of potable water delivered produced (i.e., purchased from MWD, plus water taken from Maerkle Dam) per year.

## WHAT THE DATA MEANS

**Unaccounted for Water:** The unaccounted for water measure, if kept within the benchmark, represents the results of an efficient and fiscally responsible operation. If the percentage of unaccounted for water is high, the result is potential revenue loss to the Water Operations Enterprise Fund.

**Cost of Service:** The annual expenditures per acre-foot of potable water delivered represent an efficient system when the benchmark is achieved. The outcome is to satisfy customer demands with safe, reliable water within a prudent level of expenditures.

## **DEPARTMENTS INVOLVED**

Maintenance and Operations.

## **BENCHMARK**

**Unaccounted for Water:** Annual unaccounted for water not to exceed <u>6.0%</u> as set by the California Department of Water Resources. Distribution system losses commonly range between 6% and 15%.

**Cost of Service:** The cost of service will not exceed \$1,531 per acre-foot of water produced. This benchmark was established based on results of a survey conducted by the American Water Works Association in February 2005.

\$1,531 per mg is the median score for all agencies surveyed within the 50,001 to 100,000 customer base category. The 25<sup>th</sup> percentile score is \$812 per mg. The 75<sup>th</sup> percentile score is \$2,088 per mg. This is the first year that this benchmark has been used and will be updated based on the results of subsequent surveys conducted by AWWA if available.

RESULTS Unaccounted for Water

Fiscal Year	Water Loss 1.		
Benchmark	< 6%		
2001	4%		
2002	4%		
2003	5%		
2004	6%		
2005	5%		

<sup>1.</sup> New water meters have an average rate of error of +1.5%. As a result, the percentage of unaccounted for water will never be zero.

# Cost of Service

Fiscal Year	Acre-Feet Produced	Cost of Service 1	Cost Per Acre-Foot Produced	Benchmark <sup>2</sup>
2001	18,949	\$13,923,063	\$735	
2002	20,689	\$14,979,036	\$724	
2003	20,241	\$15,290,549	\$755	
2004	21,160	\$16,579,385	\$784	
2005	20,178	\$16,716,493	\$828	\$1,531

<sup>1.</sup> The new benchmark excludes depreciation as part of annual costs. Annual costs from previous years were reduced by the amount budgeted for depreciation in those previous years.

#### **ANALYSIS**

**Unaccounted for Water:** This is an internal measure that is used to monitor performance over time and reflects that the established benchmark is being achieved. The fluctuations of percentages could be the result of variances in water meter reads. As water meters age or are affected by conditions within a vault pit setting, mechanical meters can become less accurate. A portion of water loss may be attributable to the inaccuracy of older, mechanical meters. The Meter Services Division continued with its implementation of a more aggressive meter exchange program in fiscal year 2005 that resulted, in part, to a reduced percentage of unaccounted for water.

Water can also be lost as a result of flushing activities designed to maintain water quality, water used to clean water storage facilities and water used

<sup>2.</sup> Source: AWWA publication titled, "Benchmarking Performance Indicators for Water & Wastewater Utilities: Data and Analyses Report, "dated 02/2005. Data population category, 50,000-100,000.

during new pipeline construction. New construction activity continues to be high in Carlsbad. It is expected that in subsequent years as new construction declines, the percentage of unaccounted for water may decline.

Using data from a water survey conducted by the American Water Works Association, organizations of similar in customer base size to that of the District reported a median water loss of 9.6%. Using this measure as another benchmark comparison indicates that the Carlsbad Municipal Water District is doing an efficient job of ensuring that water purchased/produced is reaching its customers and is clearly within best practices standards.

Cost of Service: This is the first year that staff has used data from a water agency survey conducted by the American Water Works Association. The cost of service per acre-foot of water produced is one of two measures that the AWWA reports in its survey report. The other measure is cost of service per account. Only one of the two-benchmark standards is being used in this year's report. The cost per account measure may be used in subsequent reports if staff can determine that this data is meaningful to Carlsbad. Not contained in AWWA's report is the age of the various agencies being surveyed, i.e., whether or not they are at build-out, etc. and the make up of the agencies customer base; single-family, commercial, industrial, irrigation, etc. This detail will be researched in more detail for next year's report.

For fiscal year 2005, Carlsbad's cost of service of \$828 per million gallons (mg) is significantly below the AWWA survey benchmark of \$1,531/ac.-ft. The AWWA survey benchmark is the median score of all results. Carlsbad's cost of service measure ranks in the 25th percentile of all those surveyed. This ranking seems to indicate that Carlsbad's water system is being managed in a financial efficient manner. The low cost may also be indicative of a system that is relatively new and has not yet experienced significant failures or greater than anticipated unplanned maintenance work which can increase as a system ages.

### **ACTION PLAN**

# **Unaccounted for Water:**

- Staff will continue with the meter replacement program based on the standards developed in the Maintenance Assessment Program.
- Staff will more closely monitor the use of water by contractors on large construction sites.
- Continue research of implementation of a mobile or fixed-based radio-read automated meter reading system.

# Cost of Service:

• Staff will continue to use the results of the AWWA survey as a "best practices standard." If this information is not published next year, staff will

- research and review other survey data that is available to determine an appropriate best practices standard.
- In fiscal year 2006, staff will continue to research the feasibility of implementing a mobile radio-read meter reading system. If such a system is approved, the costs associated with data use collection could be reduced significantly.
- Staff will conduct more detailed research of data from the AWWA report to determine if this data is meaningful to Carlsbad. Issues such as whether or not an agency is near build-out, the number and type of customer classifications, etc., will be reviewed and may be included in next year's report.

# POINT OF CONTACT

Clint Phillips (760) 438-2722, x 7110, cphil@ci.carlsbad.ca.us.

## WATER SERVICE CUSTOMER SATISFACTION

#### THE OUTCOME

A high level of customer satisfaction

### THE MEASUREMENT

City of Carlsbad Public Opinion Survey.

#### WHAT THE DATA MEANS

Highly satisfied customers are an indication that we are providing services in a manner that is desired and/or expected, contributing greater confidence in the Maintenance & Operations Division and local government in general, resulting in high quality of life for community members.

## **DEPARTMENTS INVOLVED**

Maintenance and Operations/Water Operations, Construction Maintenance and Utility Account Maintenance; Finance/Utility Billing

### **BENCHMARK**

90% of customers rate water services as "good or excellent."

#### RESULTS

Benchmark	2001	2002	2003	2004	2005
90%	91%	89%	91%	No data	93%

## **ANALYSIS**

The customer service rating for this measure has consistently met or exceeded the benchmark for a number of years, and there is no anticipated change in the service levels. As a result, it was determined that this question would be asked only in alternating years. 2004 was an "off year," but in 2005 the City's customer service rating in water service once again exceeded the benchmark.

Water service citywide is provided by three separate water agencies; the Carlsbad Municipal Water District, the Olivenhain Municipal Water District and the Vallecitos Water District.

The service areas for these agencies are described as follows:

- <u>Carlsbad Municipal Water District Service Area (CMWD):</u> The CMWD service area covers approximately 85% of the city and generally covers the area north of La Costa Avenue.
- <u>Olivenhain Municipal Water District (OMWD):</u> OMWD serves several thousand Carlsbad residents in the area generally south of La Costa Avenue

- bordered by the southern and eastern boundaries of the incorporated area of the City of Carlsbad.
- <u>Vallecitos Water District Service Area:</u> The VWD service area resides generally within the central/eastern portion of the Southeast Quadrant of the City.

In this years report, staff successfully worked with SBRI to develop a service area comparative analysis of customer satisfaction by comparing SBRI's list of respondents from the Southeast Quadrant to lists of Carlsbad customers being served by OMWD and VWD. Staff is now able to differentiate water service customer satisfaction results between the Carlsbad Municipal Water District and those who receive services from other service providers. The survey results revealed that customer service and satisfaction within the CMWD service area is still above the benchmark and consistent with citywide results incorporating the other two service providers.

## **ACTION PLAN**

Continue to include water services questions in the citywide public opinion survey in alternating years and collect data by City quadrant areas.

### POINT OF CONTACT

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## RECYCLED WATER SERVICE DELIVERY

#### THE OUTCOME

Recycled water system reliability.

### THE MEASUREMENT

This measure uses a multi-modal approach combining:

**Annual and Four-Year Cross Connection Tests:** Percentage of required annual and Four-Year Cross Connection Tests completed during the fiscal year.

**Walk-thru Inspections of Recycled Water Sites:** Percentage of recycled water use sites that are physically inspected during the fiscal year.

## WHAT THE DATA MEANS

Measures the level at which operations staff is performing required inspections and testing of recycled water use sites.

### DEPARTMENTS INVOLVED

Public Works/Maintenance and Operations

## **BENCHMARK**

**Annual and Four-Year Cross Connection Tests:** At least <u>90%</u> of all scheduled cross connection tests are completed annually to ensure that no cross connections exist between the potable and recycled water systems.

**Walk-thru Inspections of Recycled Water Sites:** At least <u>90%</u> of all recycled water use sites are inspected annually to ensure compliance with rules and regulations regarding signage, valve labeling, and marking above-ground appurtenances. Inspections also include noting any "ponding" and overspray or run-off of recycled water onto unapproved areas.

## RESULTS

		% Maintenance Completed		
Activity		FY 2003	FY 2004	FY 2005
Planned Testing	Benchmark			
Cross Connection Test	90%	100%	71%	86%
Four-Year Cross Connection Test	90%	100%	200%	125%
Planned Inspections	Benchmark			
Walk-Through Inspections	90%	96%	81%	91%

	City of San Diego	Otay WD	Padre Dam MWD	North County City	City of Carlsbad
No. of Recycled Water Uses	350	465	166	150	103
Sites	000	100	100	100	100
No. of Annual					
Walk-Thru Inspections	350	No data	166	90	94
No. Annual &	330	39	2	0	6
4-yr. C/C Tests	300	14	25	75	25
% Tests					
Completed	68%	100%	100%	50%	100%

#### ANALYSIS

Annual and Four-Year Cross Connection Tests: The purpose of the cross connection test is to reveal any connections between the potable and recycled water systems. The general method is to shut off either the potable or the recycled water, depressurize the system, and leave it for a period of time, optimally 24 hours. Pressure recorders are attached to both the system that is depressurized and the system that remains on. This procedure is then reversed. Re-pressurization of the depressurized system indicates a possible cross connection and warrants further investigation to identify if any cross connection exists.

These tests occur four years after the initial installation of a recycled water site and every four years thereafter. For the purposes of establishing annual productivity projections, all existing recycled water sites are divided by four and this number is used for the productivity projection for the year. Because the City is still in a growth mode, the number of new sites that come on line each year will vary. Consequently, the number of sites that need inspection each year also varies. The result is that in years where greater than the normal number of recycled water sites are installed, the number of sites tested will be

greater then the projected productivity. Conversely, in years where less than the normal number of recycled water sites are installed, the number of sites tested will be less then the projected productivity.

Fiscal year 2005 is an example of the productivity being slightly lower because staff performed fewer tests than the projected average. The industry standard is to complete testing at all sites during the year. The benchmark partner data above indicates that there are varying degrees of productivity in inspections and testing depending upon the availability of staffing resources. The City of Carlsbad has been able to secure sufficient resources to maintain its internal benchmark. When the City reaches build-out and the number of sites to be inspected stabilizes, staff will be able to record and project more consistent annual productivity for this work.

**Walk-thru Inspections of Recycled Water Sites:** As required by the California Department of Health Services and the San Diego County Department of Environmental Health Services, staff physically walks all recycled water use sites to ensure compliance with appropriate regulations regarding signage, tagging valves, and marking above ground appurtenances. While on site, staff also notes any ponding and overspray or run-off of recycled water onto unapproved areas.

Data is captured for each fiscal year ending on June 30. In some cases, certain walk-thru inspections started in a fiscal year may not be completed until after June 30. When this occurs the productivity gets recorded into the following fiscal year. This results in productivity for the current year falling slightly below projections.

Fiscal year 2005 is an example of the productivity being slightly higher because staff completed inspections begun in the previous fiscal year (2004). More meaningful interpretation of this data will be realized when evaluated/analyzed over several years and once the size of the City's recycled water system stabilizes; i.e., the number of recycled water use sites remains relatively constant over time. To put the significance of growth into perspective, there are currently 103 recycled water use sites in the City. At build-out, it is estimated that there will be 450 total recycled water use sites.

## **ACTION PLAN**

Meet with partner agencies to further refine benchmarks and discuss performance measurement strategies.

## POINT OF CONTACT

Clint Phillips (760) 438-2722 x7110, cphil@ci.carlsbad.ca.us.

## RECYCLED WATER DELIVERY COST EFFICIENCY

#### THE OUTCOME

Recycled water operations delivery efficiency.

## THE MEASUREMENT

This measure uses a multi-modal approach combining:

**Water Loss:** The percentage of produced recycled water loss in the distribution system that is unused by customers. Water loss is defined as the amount of recycled water the City is contractually obligated to purchase for a year plus any potable water added to the distribution system (recycled water produced), minus the amount of recycled water sold for the year, divided by recycled water produced.

**Cost of Service:** The total cost of service using actual expenditures, including contractual purchase agreements with the Leucadia Wastewater Authority and Vallecitos Water District, divided by the total of acre-feet of recycled water produced.

#### WHAT THE DATA MEANS

**Water Loss:** The water loss measure represents the effectiveness by which the City is able to use all the recycled water being delivered via contractual purchase agreements with the Leucadia Wastewater Authority and Vallecitos Water District. The percentage of loss will decrease as demand increases due to an increase in the number of recycled water connections.

**Cost of Service:** The annual expenditures per acre-foot of recycled water delivered represent an efficient system when the benchmark is achieved. The aim is to satisfy customer demands for a reliable source of non-potable water within a prudent level of expenditures.

## **DEPARTMENTS INVOLVED**

Public Works/Maintenance and Operations.

## **BENCHMARK**

**Water Loss:** The benchmark for this measure will be established after further research and meetings with partner agencies have been held. According to California Department of Water Resources Standards, system losses range from 6% to 15%.

**Cost of Service:** Annual cost of service per acre-feet of recycled water produced will not exceed \$700. This benchmark was established based on information reported in the 2004 base line year; however, a best practices standard may be substituted in subsequent reports if comparable benchmarks can be obtained from outside agencies.

# RESULTS Water Loss

Fiscal Year	Water Loss	
Benchmark	To be determined	
2004	25%	
2005	23%	

Fiscal Year 2004-05				
Carlsbad	% of		Delivery	Est. Cost of
Production	Production	Quantity	Price per	Unused
(AcFt.)	Lost	Lost (AcFt.)	AcFt. 1.	Deliveries
3,056	23%	703	\$456	\$320,568

<sup>1.</sup> Delivery price per acre-foot is a "melded rate" from the two take-or-pay contracts. The actual delivery price per acre-foot is slightly higher because \$456 it does not include the cost of make-up water purchased from the potable water system.

# Cost of Service

	Carlsbad		Cost Per	
Fiscal	Production	Cost of	Acre-Foot	
Year	(Acre-Ft.)	Service	Produced	Benchmark
2004	2,277	\$1,643,079	\$722	\$700
2005	3,056	\$1,972,741	\$646	

### **ANALYSIS**

Water Loss: This is an internal measure that is used to monitor performance over time, it is not indicative of a "tight system." Carlsbad currently purchases recycled water from two agencies on a "take-or-pay" basis. This means that recycled water is delivered to Carlsbad in fixed, agreed-upon amounts. With this arrangement, at various times of the year supply can exceed demand. And because of Carlsbad's limited storage capacity, the result is a surplus of recycled water that cannot be stored and is instead discharged to the ocean via Encina Wastewater Authority's outfall line. The amount of discharge is represented in the water "loss" measure. Because Carlsbad is contractually obligated to purchase the water even at times when it is not needed, expenses are incurred for unused water. Over time, as the number of recycled water connections increases, the increased demand will allow for the City to use most, if not all, of the water being delivered. A more definitive water loss

benchmark will be determined once the balance of supply and demand is reached.

Cost of Service: The cost of service to "produce" recycled water (\$646 per acre-foot) includes all annual expenditures for personnel, services and supplies, including the cost of recycled water purchased from the Vallecitos Water District and Leucadia Wastewater Authority, plus water purchased as "make-up water" from the Carlsbad Municipal Water District. During the dry Summer months, demands for recycled water occasionally exceeds available supplies. When this occurs, potable water from the District's supply is piped into the recycled water system to replace (i.e., "make up for") recycled water shortages. The recycled water-operating budget is charged for this use and that amount is factored into the total production cost of recycled water. As additional services are added to the recycled water system as described earlier, it is expected that economies of scale will result in lower per-unit production costs.

This measure is still relatively new. It has not yet been determined if the \$456 per acre-foot purchase price (derived from a "melded rate" from the two take-orpay contracts), the \$646 per acre-foot production cost, or the percentage relationship between the two are within any existing recognized best practices standards. Staff will continue to meet with other outside agencies to discuss recycled water costs and expenses in more detail.

## **ACTION PLAN**

**Water Loss:** It is expected that recycled water loss will decrease as irrigation demands increase due to the addition of new recycled water irrigation sites, and implementation of Recycled Water Phase II that will include retrofitting existing potable water irrigation to recycled water.

# Cost of Service:

• Staff will continue to meet with other outside agencies to discuss recycled water costs and expenses in more detail.

## POINT OF CONTACT

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# GROWTH MANAGEMENT/WATER DISTRIBUTION SYSTEM

## THE OUTCOME

Adequate fire flow and water supply for City residents and businesses.

### THE MEASUREMENT

Water capacity will meet demands as determined by the appropriate water district and is provided concurrent with development.

A minimum 10 average-day potable storage capacity is provided concurrent with development in the Carlsbad Municipal Water District (CMWD).

## WHAT THE DATA MEANS

Provide water for the greater demand of the two conditions within the Carlsbad Municipal Water District service area:

- maximum day demand plus a fire event
- peak hour demand.

The 2003 CMWD Water Master Plan Update is used to identify the facilities necessary for construction within the Carlsbad Municipal Water District.

Water storage in the Carlsbad Municipal Water District is equal to or greater than 10 average-days. The Vallecitos Water District and the Olivenhain Water District service the La Costa area. The City coordinates land development with these agencies and conditions projects to ensure facilities are in place prior to the completion of the development project.

### DEPARTMENTS INVOLVED

Engineering, Maintenance & Operations.

## **GROWTH MANAGEMENT STANDARD**

Waterline capacity to meet demand as determined by the appropriate water district must be provided concurrent with development. In addition, a minimum 10-day storage capacity must be provided prior to any development.

## **DEMAND**

Water service demand requirements are estimated using a computer model to simulate the two water distribution scenarios: 1) maximum day demand plus a fire event, 2) peak hour demand as well as other possible scenarios. This computer model was calibrated using actual flow measurements collected in the field to verify it sufficiently represents the actual water system.

# 10 Average-day Storage

Existing Maximum Daily Demand	27 GD
Existing Storage Requirement	40 GD
Existing Storage	51 MGD
Future Maximum Daily Demand	40 GD
Future Storage Requirement	55 MGD

### RESULTS

Based on the water model analysis prepared with the 2003 Water Master Plan Update, future pipelines and water system facilities were identified to ensure a complete water system is constructed to accommodate future customers. In addition, funds for the construction of future facilities were included in the FY 2005-06 Capital Improvement Program. Therefore, the future water infrastructure is programmed to be in place at the time of need in order to ensure compliance with the performance standard.

Adequate 10 average-day storage capacities exist for the current customers in the Carlsbad Municipal Water District based on the capacity of existing and future reservoirs. In 2004, the Olivenhain Municipal Water District (OMWD) completed construction of a water treatment facility at the San Diego County Water Authority Emergency Storage Reservoir. Therefore, areas of Carlsbad served by both CMWD and OMWD meet the minimum storage capacity.

## **ANALYSIS**

The 2003 Water Master Plan Update identifies facilities necessary for City build-out conditions. The update identified additional improvements required to meet future water demands and the need for two additional water storage tanks to meet future 10 average-day storage requirements. Water connection fees were updated based on these improvements.

Recycled water used for irrigation was incorporated into the 2003 CMWD Water Master Plan Update. The use of seawater desalination was not included in the master plan update but is being considered in a separate study that incorporates updated future water demands.

As future land development projects are processed through the Development Services Division, the Water Master Plan is periodically used to check pipeline sizes and facility capacities to verify adequacy. In addition, land development projects may be required to install a master plan water project concurrent with construction of that specific project.

## **ACTION PLAN**

- Continue to utilize the 2003 Water Master Plan to plan and construct major water transmission lines to ensure adequate potable water and fire flows needs area available at time of need.
- Coordinate and participate in the development of a proposal by Poseidon Resources and the San Diego County Water Authority to construct a seawater desalination facility for the benefit of Carlsbad. (Currently preparing Environmental Impact Report)
- Continue to install the recycled water transmission system. Continue with the installation of retrofit work and conversions to expand the use of recycled water.

# POINT OF CONTACT

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### ANNUAL GROWTH MANAGEMENT DWELLING UNIT REPORT

In 1986 voters approved and the City of Carlsbad enacted the <u>Growth Management Plan</u>. The Plan requires that public facilities and services be provided concurrently with new growth and development according to adopted facility and service performance standards. The Plan also established a limitation on the maximum number of future residential dwelling units that could be built in the City both Citywide and by Quadrant of the City. The Plan cannot be deleted, amended, or the dwelling unit limitation exceeded without a subsequent vote of citizens. This <u>State of Effectiveness Report</u> also provides for the annual monitoring of the performance standards required in the Growth Management Plan. Those Performance Standard are distributed in the Report in the appropriate City Council Strategic Goal section. As of March 1, 2006 the existing units by Quadrant are:

- Northwest 12,653 Existing Units
- (2,717 Future Units could occur before the Quadrant Cap of 15,370 is reached)
- Northeast 5,416 Existing Units
- (3,626 Future Units could occur before the Quadrant Cap of 9,042 is reached)
- Southwest 10,517 Existing Units
- (2,342 Future Units could occur before the Quadrant Cap of 12,859 is reached)
- Southeast 14,460 Existing Units
- (2,868 Future Units could occur before the Quadrant Cap of 17,328 is reached)

